MEETING

STATE OF CALIFORNIA

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BOARD OF ADMINISTRATION

INVESTMENT COMMITTEE

OPEN SESSION

ROBERT F. CARLSON AUDITORIUM

LINCOLN PLAZA NORTH

400 P STREET

SACRAMENTO, CALIFORNIA

MONDAY, MAY 15, 2017 9:03 A.M.

JAMES F. PETERS, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 10063

APPEARANCES

COMMITTEE MEMBERS:

- Mr. Henry Jones, Chairperson
- Mr. Bill Slaton, Vice Chairperson
- Mr. Michael Bilbrey
- Mr. John Chiang, represented by Ms. Jeree Glasser-Hedrick
- Mr. Richard Costigan
- Mr. Rob Feckner
- Mr. Richard Gillihan, represented by Ms. Katie Hagen
- Ms. Dana Hollinger
- Mr. J.J. Jelincic
- Mr. Ron Lind
- Ms. Priya Mathur
- Mr. Theresa Taylor
- Ms. Betty Yee

STAFF:

- Ms. Marcie Frost, Chief Executive Officer
- Mr. Ted Eliopoulos, Chief Investment Officer
- Mr. Matt Jacobs, General Counsel
- Mr. Eric Baggesen, Managing Investment Director
- Ms. Natalie Bickford, Committee Secretary
- Mr. Dan Bienvenue, Managing Investment Director
- Mr. Simiso Nzima, Investment Director

APPEARANCES CONTINUED

STAFF:

- Ms. Anne Simpson, Investment Director
- Mr. Wylie Tollette, Chief Operating Investment Officer

ALSO PRESENT:

- Ms. Margaret Brown
- Mr. Allan Emkin, Pension Consulting Alliance
- Ms. Christy Fields, Pension Consulting Alliance
- Mr. Michael Flaherman
- Mr. Andrew Junkin, Wilshire Consulting
- Mr. Steve McCourt, Meketa Investment Group
- Mr. Damien Mitchell, StepStone
- Mr. Michael Ring, Service Employees International Union
- Mr. Bryan Snow, Corona Police Officers Association
- Ms. Kirsten Spading, Ceres

	I N D E X	PAGE
1.	Call to Order and Roll Call	1
2.	Executive Report - Chief Investment Officer Briefing	4
3.	Consent Items Action Consent Items: a. Approval of the April 17, 2017 Investment Committee Meeting Minutes	23
4.	Consent Items Information Consent Items: a. Annual Calendar Review b. Draft Agenda for the June 19, 2017 Investment Committee Meeting c. Monthly Update - Performance and Risk d. Monthly Update - Investment Compliance e. Legislation - Federal Investment Policy Representative Update	23
Information Agenda Items		
5.	Asset Allocation a. Private Asset Class Roles and Benchmarks	28
6.	Program Reviews a. Governance and Sustainability Update	77
7.	Total Fund a. Investment Office Cost Effectiveness b. Investment Office Roadmap and Target Operating Model Update	117
		140
8.	Summary of Committee Direction	158
9.	Public Comment	159
Adjournment		162
Reporter's Certificate		163

1 PROCEEDINGS 2 CHAIRPERSON JONES: Good morning. I'd like to 3 call the Investment Committee meeting to order. And the 4 first order of business is roll call please. COMMITTEE SECRETARY BICKFORD: Henry Jones? 5 CHAIRPERSON JONES: Here. 6 7 (Laughter.) CHAIRPERSON JONES: 8 It's early 9 COMMITTEE SECRETARY BICKFORD: Bill Slaton? 10 VICE CHAIRPERSON SLATON: Here. COMMITTEE SECRETARY BICKFORD: Michael Bilbrey? 11 COMMITTEE MEMBER BILBREY: Good morning 12 COMMITTEE SECRETARY BICKFORD: Good morning. 13 14 John Chiang represented by Jeree Glasser-Hedrick? 15 ACTING COMMITTEE MEMBER GLASSER-HEDRICK: 16 COMMITTEE SECRETARY BICKFORD: Richard Costigan? 17 COMMITTEE MEMBER COSTIGAN: Here. COMMITTEE SECRETARY BICKFORD: 18 Rob Feckner. 19 COMMITTEE MEMBER FECKNER: Good morning. 20 COMMITTEE SECRETARY BICKFORD: Good morning. COMMITTEE SECRETARY BICKFORD: Richard Gillihan 21 22 represented by Katie Hagen? ACTING COMMITTEE MEMBER HAGEN: Here. 23 2.4 COMMITTEE SECRETARY BICKFORD: Dana Hollinger?

Here.

COMMITTEE MEMBER HOLLINGER:

25

```
1
             COMMITTEE SECRETARY BICKFORD: J.J. Jelincic?
 2
             COMMITTEE MEMBER JELINCIC: Greetings.
             COMMITTEE SECRETARY BICKFORD: Good morning.
 3
             Ron Lind?
 4
             COMMITTEE MEMBER LIND: Here.
 5
 6
             COMMITTEE SECRETARY BICKFORD:
                                            Priya Mathur?
7
             COMMITTEE MEMBER MATHUR: Good morning.
8
             COMMITTEE SECRETARY BICKFORD: Good morning.
9
             Theresa Taylor?
10
             COMMITTEE MEMBER TAYLOR: Here.
             COMMITTEE SECRETARY BICKFORD: And Betty Yee?
11
             COMMITTEE MEMBER YEE:
12
                                    Here.
13
             CHAIRPERSON JONES: Okay. Thank you.
14
             Before I call on the Chief Investment Officer,
15
    I'd like to take a moment of personal privilege on a
16
    couple of items. First to welcome Ms.
17
    Glasser-Hendricks[sic] to the Investment Committee.
18
    will be representing the State Treasurer on the Investment
19
    Committee going forward.
20
             So welcome, Ms. Glasser-Hedrick.
21
             The other thing I would like to do is make a few
22
   comments on our CalPERS/CalSTRS Diversity Forum. On May
23
    the 10th CalPERS and CalSTRS hosted the 2017 Diversity
2.4
   Forum. The event was a success with approximately 450
```

attendees from across the investment industry, experts

25

from organizations such as Harvard, McKinsey, Mellon
Capital, and Blackstone came and shared their insights and
experience with attendees.

We had keynote speakers from Helena Morrissey of the Diversity Project and John Thompson, Board Chairman of Microsoft. Both keynotes drove home powerful messages about the importance of a diverse workforce.

In addition to our keynotes, we had panel sessions covering key topics, such as which method yield the best results in increasing diversity, real-life cause case studies from organizations that have successfully increased diversity, how to improve diversity in the Board room, the efforts currently undertaken by both CalPERS and CalSTRS, growing the pipeline of diverse talent at all levels of the organization, and a very special panel that addressed what mentor/mentee relationship can mean to participants in the organization.

Videos of the session will be available on CalPERS' and CalSTRS' websites soon. We want to thank our strategic partners, our investment managers who helped make this event a success.

Lastly, thanks to you, the CalPERS and CalPERS staff, and the event team for their efforts to plan and orchestrate this outstanding event.

Thank you very much.

1 Mr. Eliopoulos.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well, Mr.
Chair, members of the Committee, thank you for that
acknowledgement. It was a very team-oriented effort, both
here at CalPERS and at CalSTRS in putting the agenda
together and the curriculum together. Over a year in the
planning of that event, particularly our Investment
Manager engagement program who, during this past year,
under the leadership of Laurie Weir and now Clint
Stevenson. That whole team worked tirelessly.

And I just, if I could, highlight one staffer in particular who led this effort for CalPERS, Carrie Douglas-Fong was very incredible really in her envisioning of the agenda, the topics, seeking out the speakers that you saw come to fruition at the event. She was tireless in her efforts to really put on a terrific day, but also you could see the effect of team work, both within our entire organization, both the Board and staff, as well as CalSTRS. And I think it's a real good example of what you can accomplish when you have two great organizations like CalPERS and CalSTRS working together for common goals and betterment of the marketplace.

CHAIRPERSON JONES: Okay. Before you start, Mrs. Mathur wanted to --

COMMITTEE MEMBER MATHUR: Thank you. I just want

to say as somebody who has attended most of the diversity forums that we've hosted in the past, all of which were good, this one really blew me away. And I do think it's a credit to Carrie Douglas-Fong and the rest of the team, both here at CalPERS and at CalSTRS. And I -- it really was a remarkable, inspiring, content-rich event. And I very much enjoyed it, and everyone I met did too.

Thanks.

 $\label{eq:chief_investment_officer_eliopoulos:} \mbox{Wonderful.}$ Thank you

CHAIRPERSON JONES: Okay thanks.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Now turning -- turning to my comments of the morning for this month. I think the Committee will remember last month, I gave a summary of the political and economic climate in Europe. Today, I thought I'd turn our attention to Asia, another vital region and marketplace for our investment portfolio, and key to our success in investing into the future.

Before I start, I think it is worth contrasting Asia to Europe at the very outset to frame my comments. They're very different regions of the globe. As we saw last month, you know, Europe is a relatively, relatively homogeneous region. It has a European Union that we discussed which provides an overarching political super

structure.

It has a single currency, for the most part, within the continental European Union. And while we discussed certainly the risk to that relative homogeneity, it is still possible, and even credible, to discuss and summarize Europe as a region in a brief discussion.

Asia, on the other hand, is a much, much more heterogeneous region. We just talk a little bit about some of the countries that make up that region of the globe, China, Hong Kong, Taiwan, Japan, South Korea, Australia, Singapore, at least with that grouping all major developing or developed economies with different currencies and certainly major political differences in their governance.

Some of the major emerging economies within Asia, such as India, Indonesia, Malaysia, Thailand, Vietnam, Cambodia, also with very different characteristics and currency. So I am a bit trepidatious to summarize this region in a brief commentary. And certainly, there is not enough time to discuss each of the individual countries today, but I'll try and highlight some of the major countries as I go forward.

A key unifying theme to find within the Asian region, and across that region, is growth. We've seen, and we've discussed in this Investment Committee over a

decade now, the high levels of growth in the Asia region.

And really the key question for investors going forward is whether these high rates of growth in the Asia region, and particularly in China, will sustain into the future.

Looking over the course of this past year, Asia has been a major Beneficiary in the uptick in improved global activity and global trade in the past year. In particular, Japan and China have seen a cyclical pick up in their own trade, in correlation with the Global trade. As we will -- as I will discuss briefly later, there are still structural issues that remain both these economies, demographics, debt, structures within their corporate -- corporate marketplace that are headwinds for both Japan and China, and somewhat for Korea as well.

On the other hand, India and Indonesia, which have much, much better demographics, their age profile, are making very important structural changes to their economy. And that is worth bearing much attention going forward, as at least some of these efforts of re-regulation, de-regulation in these very important economies are having some encouraging developments of late.

Turning first to Japan, we've seen a modest pick up -- as I mentioned, in Japan there's been a modest cyclical pick up in their economy. Most importantly, the

Japanese Central Bank has noted this most recent events of the year, that the Japanese business cycle has recently been turning toward a moderate expansion, according to the Japanese Central Bank with exports in business investment on an increasing trend, and corporate profits and business sentiment improving in a wider range of industries.

Both foreign trade and the Japanese labor market, and this is especially pronounced, given the strong growth of strong growth of -- strong growth of female employment within Japan have certainly improved the Olympics, the Summer Olympics is coming to -- coming to Japan and pre-Olympics related spending has also contributed to upticks in the larger cities within Japan.

That said, turning to some structural issues, momentum for the so-called third arrow reforms of Prime Minister Abe has seen some slowing. And there is some chance that Prime Minister Abe may call an early election, so that he can perhaps move more aggressively on some of the more difficult or unpopular structural reforms within their own labor market, particularly agriculture and corporate governance.

Japan is still hoping for a Trans-Pacific

Partnership without the United States. The 11 countries
that had signed on to the TPP combined importantly with a
bilateral trade agreement with the United States,

hopefully replicate some of the positive features of the TPP.

One of the main demographic challenges that Japan confronts is their aging and falling population, and it's effect on productivity. And Japan continues to be a very strong early adopter of what has been called the Internet of things, robots, drones, driverless travel, et cetera.

And perhaps this development has made, at least temporarily, inbound migration more acceptable within Japan, which is also helping their economy.

With further economic and fiscal consolidation on the horizon in Japan, there's a further consumption tax slated to go into effect in 2019, as well as tackling Social Security reform, combined with very stubborn inflation, low inflation expectations within the country, the Bank of Japan, we believe, is likely to continue with its very accommodative QE program for the foreseeable future.

You know, that is targeting negative interest rates modestly for the short-term, and perhaps a zero percent target for the 10-year government bond. I mentioned that just because it's important to put this in for global investment, for Japanese investors, in order to obtain the positive returns they increasingly look to diversify into the rest of the world, and particularly

into U.S. securities, both our stock market and bond market. And that's something that we watch very carefully.

Turning to China, President Xi, I think the main theme is the flexibility that he and the Chinese government have to orchestrate quite major structural shifts to the economy, that is overarching theme to the Chinese government's efforts over the course of the last several decade and into the next decade.

In recent years, we've talked about, and seen a structural down-shift in Chinese growth, as they try to transition from their traditional old industries with over-capacity towards their service sector going forward.

Importantly, really over the course of the last six to eight years, we've seen a trend towards fairly apparent, many cycles, around two years. And that's certainly been true the last six careers where you see a rebound in the Chinese economy based on improved global trade, and importantly, policy efforts take -- undertaken by the Chinese government to react to both slowdowns -- the slow down we saw in 2015 in China to stimulate the economy, and then efforts to cool the economy following efforts to stimulate the economy. And we've seen that fairly consistently the last six years.

Almost as if on cycle now, on schedule, the

authorities are again tapping the brakes a bit to the Chinese economy to level out domestic demand and credit growth in applying more measures to cool down the local housing and local government-infused spending.

2.4

Importantly, attention has now turned this year to what may happen after this fall's 19th Party Congress. A very important political event in China. That is expected to see President Xi's hold on the direction of the economy strengthened following elections at the 19th Party Congress.

In that regard, with respect to the Chinese economy, the main challenge is really remain the same that we've discussed many times here in this Investment Committee. They have less favorable demographics going forward. They've put in place very aggressive and -- aggressive measures to minimize the cost of corruption within their economy and their government, and we expect that to continue.

And they continue to grapple with the so-called middle income trap, as they transition their economy to a more consumer-led economy going forward. President Xi's mandate, we believe, to transform the economy will be enhanced following the election this coming fall.

Despite the challenges of really transitioning the composition of growth within China, there are many

innovative and important techniques and efforts that the Chinese government have signaled in the coming years.

Some of the most important are their efforts at urbanization throughout the country, particularly what started on the east coast of China, now moving into the middle and western portions of the country.

In addition to that, a very significant effort led by President Xi called the One Belt, One Road policy to really reinvigorate the old Silk Road by stretching out the infrastructure development of China through the Asian region, through the Middle East into Europe, and both on road as well as through ports and sea and sea.

They have some other very innovative efforts going on. I would highlight one in the Beijing region. I was just in Beijing. The Xiongan New Area Smart City development just 60 miles southeast of Beijing. Again, attempts by the Chinese government to reinvigorate and manage this structural shift of their economy.

These are all positive indications. And certainly President Xi will have the tools, we believe, to maneuver and guide the Chinese economy going forward, but it's not without its risks.

Turning to India, Indonesia, and Korea. And that will conclude -- just to give the Committee a bit of -- a look forward to the commentary, but I think it's

worthwhile spending some time on this important region.

India has been traditionally and historically a difficult place for business activity, given its complex set of regulations and historical -- historical, in the past, hostility to foreign investment.

However, the current government, the Government of Narendra Modi has been steadily reforming the financial and business regulation within -- within India with a very specific goal of increasing both domestic and foreign investment in India. And given his government's popularity, we are relative optimistic that that reform program will continue and even accelerate going into the coming years.

India is a very attractive place to invest for the long term, given its demographic profile. It is a country of over 1.3 billion people, as I said, enjoying some of the best demographics in the world. Its median age is about 26.8 years old, making it one of the youngest large countries in the globe.

So excellent demographics with a comparatively young population, and a relatively low rate of urbanization means that India particularly will need to invest heavily in infrastructure over the coming 20 years, which will bring with it the opportunities for much investment and much risk to its current high growth of

GDP.

Indonesia -- turning to Indonesia. Similar to India, Indonesia has been experiencing a surge in economic and financial reforms. The election of their president Joko Widodo, also known as Jokowi, has allowed for a broad reform of the investment, financial, and government sectors. And similar to India, Indonesia is very attractive place to invest in the long term, as it has a very large population, of 263 million people, and excellent demographics, median age of 28, and a stable real growth rate.

Indonesia, in addition, has large natural resources that it exploits for exports. In order to continue to attract foreign capital, Indonesia will have to continue its efforts of reform of their industrial and corporate sectors, as well as attract substantial infrastructure investment to maintain their growth rates for this growing and young population.

The Government reforms in Indonesia to date have been broad, and continue to really focus on attracting foreign investment into Indonesia. The growth rates in Indonesia have been rising, while inflation, which has been historically high in Indonesia, have been falling, due to this concerted Central Bank action.

Lastly, I think it's worth noting, or spending a

little bit of time on, South Korea, a very important economy, a transitional economy that is much more akin to a developed economy in terms of its growth, and income, and inflation, and demographic profile. It has a relatively high household income and structure to its economy. And, in many ways, you can think of it as being more similar to Japan or Germany than it is to its emerging neighbors.

Having said that, South Korea has recently experienced quite serious political tension and problems. I think we've all seen the heating up of tensions in North Korea, some of the geopolitical risk that is quite extreme on the peninsula, and one of the world's great geopolitical threats.

In addition to that, South Korea has just weathered a major political crisis that resulted in the impeachment of their former -- now former president of the country.

The incoming President, President Moon, it's probably too soon to give a description of the planned economic policies and reforms. But given some of the crises that brought him into office, we would hope that some of the reform effort will be targeted directly to the corporate structures within the public stock market in Korea.

Importantly, on the geopolitical front, President Moon has advocated a dialogue and peaceful negotiation with his neighbor in the north. And that certainly is going to come under some stress going forward.

To conclude, it's a very difficult, as you can see, region to summarize in any one take, but clearly the sharply rising markets within Asian -- within Asia this past year has come amid a time of political change and uncertainty.

With respect to the private markets in Asia, we continue to explore some private market investment in Asia, most notably in private equity, real estate, and infrastructure.

However, with the high level of capital looking to invest in the Asian region, and the relatively high valuations in the private marketplaces, we are remaining disciplined and cautious. As I mentioned last month, we continue to believe that tail-risks on both sides, the upside and downside, are wider than they have been perhaps historically or even recently.

So we continue to support the current target equity weighting across the portfolio of 54 percent, with a cash target of four percent as an appropriate and reasonable and balanced approach to what is an uncertain and developing picture with many pluses and many minuses

to keep our eye on.

So with that, Mr. Chair that's my remarks for today.

CHAIRPERSON JONES: Okay. Thank you.

We do have a question. Mr. Lind.

COMMITTEE MEMBER LIND: Thank you. And, Ted,
thank you for these ongoing reports about the global
perspective. I think it gives us a real good background
on the work that we do. I do have a question though in
our -- as a large institutional investor with other
institutional investors in Asia or even Europe, how
are -- how is our work, and how are our relationships
being impacted by -- I'm trying to use a non-partisan term
here, the unpredictability of U.S. policies around the
environment, around trade, around financial markets, how
is that starting to play into the work that we do?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well,
that's a good question.

COMMITTEE MEMBER LIND: Thank you.

CHIEF INVESTMENT OFFICER ELIOPOULOS: We benefit by having -- Calpers benefits by having some very long-standing relationships across the globe in many different organizations. It spans -- I'll think of Asia because this time, an organization such as PPI, the Pacific Pension Partnership that we're in with many

significant institutional investors across the globe. And that's relationships have spanned decades. There are many similar organizations that we all participate in as well.

So we're used to having a very robust and long-standing discussions with our peers during many different market and political environments.

Certainly, we're getting more questions, I think more recently, about our own political and policy approaches in the United States than perhaps we've -- we've had more questions in the past of our peers about what may happen in the Asian region, in the European region. So I think we're being a good neighbor by being able to provide some of our own thoughts on potentials going forward.

But I think the one common denominator that I see as I go across the globe, and as our senior team goes across and talks to our peers is this notion that there are, you know, wider tail-risks, both positive and negative, that there is change coming within the U.S., as well as in many of the countries and economies that we discussed, and they all bear watching.

One of our strengths, one of CalPERS' great strengths, I believe, is the amount of capital we've spent over the decades building up relationships that hopefully give us access to information as we invest going forward.

CHAIRPERSON JONES: Okay.

Okay. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Ted, as you were talking about China, years ago we had an investment in CITIC. At the time it was known as the China International Trust Investment Corp. We eventually sold that off because it was impossible to get timely financial information about what was going on.

So my question is has China gotten better at providing timely financial information, what are the problems with getting it, and, you know, what red flags does that set off for us?

CHIEF INVESTMENT OFFICER ELIOPOULOS: It's -- in the public markets in China, they are reforming, but slowly. And one of the main tests going forward is how strong the reforms of the corporate sector, particularly in the public markets, will be. Some of the -- some of the milestones of progress have been some of the changes to the stock exchanges within China. So, for instance, the Shanghai Connect Program that was envisioned, and developed, and then strengthened allows for some stronger capital flows into and out of the Chinese market.

We're watching to see whether or not the A-share market in China will be included in the major indexes.

That will be another sign whether the reforms and the

availability of information is improving to agree to reach market acceptability.

The other issues that China needs to address with respect to transparency in their public markets are the effect of State-owned enterprises. And CITIC is a State-owned enterprise, as well as others, and how far the reforms of the State-owned enterprises will go towards market -- market preferences over perhaps governmental or other policy improvements.

So I would say they're making modest improvements. The key things to look in the future is whether or not it will be successful both in the public equity as well as on the debt markets, the inclusion in indexes. That will be a very large milestone in their road towards improvements of both speed and transparency of in formations, but they're not all the way there yet.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you, Mr. Chair.

That was a great report, Ted. I do really enjoy hearing about the geopolitics and the markets going forward. You had just said something about us spending a lot of capital in the past to build relationships. I have a concern that we are burning through that capital right

now.

And I think, in particular, you talked about the One Belt, One Road. The article I read was talking about how China was using that to export its State-owned capitalism to 60 different countries, so -- and thereby cutting the United States out. And so what kind of risk is that for our own U.S. equities and how successful do you think that would actually be?

CHIEF INVESTMENT OFFICER ELIOPOULOS: First, on capital the side, I was speaking towards our human capital. We've -- our Board and our prior Boards, as well as our staff, have developed these relationships over time.

COMMITTEE MEMBER TAYLOR: Okay. Great.

CHIEF INVESTMENT OFFICER ELIOPOULOS: That's very, very important. Although, it did not come with the spending of much actual capital.

COMMITTEE MEMBER TAYLOR: No, no, no, I get you.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Now, with respect to infrastructure spending, we have not spent -- we've not invested heavily in Asia in infrastructure. And as I said, we'd be very cautious in our approach going forward, although the opportunities are quite significant, given some of the geopolitical risks that you have to take into consideration as an investor.

I think the One Belt, One Road policy brings up both the opportunities and risks that you highlight. On the opportunity side, you see China advancing itself as a champion of multilateral trade relationships, globalization, the desire to knit together the economies of Europe, the Middle East, and Asia into a -- into a trading region of some strength -- enormous strength -- COMMITTEE MEMBER TAYLOR: Right.

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- and efficiency. It's ironic that at the same point that China is signaling that desire, that the United States is perhaps signaling a retreat from our policy as a globalization and multilateral trade, which direction actually gets implemented will be very important.

What the terms of these trade arrangements, as well as political— and policy-oriented reforms are, and much of the devil will be in the details of both approaches going forward. But certainly it will be important for investors to weigh both the benefits and risks of both approaches and see how much difference the rhetoric — perhaps the rhetoric in each case —

COMMITTEE MEMBER TAYLOR: Right.

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- will have to the actual investment opportunities on the ground.

COMMITTEE MEMBER TAYLOR: All right. Thank you.

CHAIRPERSON JONES: Okay. Thank you for that update.

The next item on the agenda is action consent item, approval of the April 17, 2017 Investment Committee meeting minutes.

Do I have a motion?

COMMITTEE MEMBER TAYLOR: Move.

COMMITTEE MEMBER MATHUR: Second.

CHAIRPERSON JONES: Moved by Mrs. Taylor,

seconded by Mrs. Mathur.

All those in favor say aye?

12 (Ayes.)

1

2

3

4

5

6

7

8

9

10

11

13

14

21

22

23

CHAIRPERSON JONES: Opposed?

Hearing none. The item passes.

The next item on the agenda is consent items.

16 And normally when there's a question on the consent

17 | information items, we pull it and put it at the end of the

18 | agenda. But since we have a request to speak on this from

19 | the public, I'm going to go head and allow that person to

20 | speak now. And that's Michael Flaherman. He had

requested to speak on this item, 4a.

MR. FLAHERMAN: Well, it's really 4c. I'm sorry.

CHAIRPERSON JONES: I beg your pardon?

24 MR. FLAHERMAN: On the subject of performance and

25 | risk. And, Mr. Chairman, let me start by thanking you for

letting me speak now, rather than having to wait until the end.

For the benefit of your new member, my name is Michael Flaherman. I'm a former member of the Board, and I'm a visiting scholar at UC Berkeley.

The reason I wanted to talk is that in December of 2015, I gave public comment before the Board about an issue, which is fund level leverage in private equity.

This is an increasingly common practice and raises significant concerns of systemic risk for your private equity portfolio.

The reason why I bring it up today is that the Chair instructed the staff at that time to bring back a report on the issue. And to my awareness, that never happened. There was never a report brought back. And that's particularly interesting, because this issue actually got a lot of attention just in the last few weeks. There's a gentleman name Howard Marks who is the CEO of a firm called Oaktree Capital in Los Angeles. He publishes a quarterly letter that is probably the second most widely read letter in the financial world, after Warren Buffett's communications.

And he wrote his last quarterly letter a couple of weeks ago about the dangers of this fund level leverage in private equity. And he really kind of reprised some of

the issues that I raised. And he raised another really important issue, which is that he said -- he said, you know, something that's really troubling about this is that -- is that fund level leverage can be used to bump up intermediate-term returns in private equity, while hurting long-term returns. And he asked the question why do people do this, right?

People do this, he argued, to game their own compensation. And I think this loops back to this organization, and to your role as Board, because it seems if me that it's especially concerning when the Chair instructs the staff to bring back a report about hidden risks in your portfolio and they don't do it, and then you have somebody like Howard Marks pointing out that that hidden risk serves to bump up people's compensation.

So I hope that there might be some effort to address this, especially, you know, just recognizing that this is a conflict of interest that your staff has, where this helps their compensation.

And you might even invite Mr. Marks to come and give you a presentation on this topic. He's down in L.A. You know, he has a lot of CalPERS money. And so I think there's an excellent chance that he would do it, if you asked him. And I also hope that you would ask your staff to respond to this concern.

Thank you.

CHAIRPERSON JONES: Okay. Thank you.

And as we normally do, we always have a tracking system to follow up to see what requests we've made and we will follow our normal procedures in that regard.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah I -- one, I'd like to follow up a little bit on that and I also have a comment on 4e.

I remember him asking for the report. I know we have gotten information about the leverage. I don't know that we've had any discussion about the incremental risks. And I was wondering if we could, in fact, ask staff to comment on that.

CHAIRPERSON JONES: Well, not at this time.

COMMITTEE MEMBER JELINCIC: Okay.

CHAIRPERSON JONES: As I said, I will follow up with staff in terms of the report.

COMMITTEE MEMBER JELINCIC: And then my other -the comment that I had said I had wanted to make is
actually on 4e, 43 of the iPad. It's federal investment
report for CalPERS. I don't know the answer to this, but
I will point out that this is dated April 17. It talks
about things that are expected to happen May 1st and 2nd.
And it's not -- I'm picking on K&L Gates, because they're

the ones who happen to be here, but it's actually true of all of our federal lobbyists. And I think we need to figure out someway to get more timely re -- updates.

You know, I see the weekly updates, so I know that they're doing them, but I think we need to figure out someway to get it to the Committee on a more timely basis.

CHAIRPERSON JONES: Okay. Thank you for your comment.

Mr. Costigan.

comments.

COMMITTEE MEMBER COSTIGAN: I'd just -- Thank you, Mr. Chair. I'd just like to echo Mr. Jelincic's comments about our federal reports. They are sort of untimely by the time we get them. And I'm not quite sure, even with the ten days notification, why we don't get something that's a little more timely. I noticed that in some of the health reports. They were running a little behind current information. So I'd like, at some point, to figure out a way to get it in a more timely manner.

CHAIRPERSON JONES: Okay. Thank you for your

And we did, by the way, have a rather lengthy suggestion on reporting processes. So perhaps the first thing is to review what we agreed upon before we take additional steps to deal with this issue.

Okay. So moving on now to the next item on the

agenda, Item 5, Asset Allocation. And who's leading this one, Mr. Eliopoulos?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Thank you, Mr. Chair. Ted Eliopoulos. You see Eric Baggesen joining us. This agenda item, 5a, is a continuation from last month where we looked at, particularly the benchmarks for the private asset classes. Today's, and this month's, discussion really is an opportunity for you to hear -- for the Committee to hear from your independent consultants on this same topic.

So really, with no further ado, what we thought we'd do, as the opinion letters are formatted in your agenda, that we just go in that same order. So I think first up we have Wilshire and Andrew, and then PCA. And then after that, I don't think we have enough seats, then we'll have Meketa and StepStone come up.

CHAIRPERSON JONES: Okay. Thank you.

MR. JUNKIN: Good morning, Andrew Junkin with Wilshire Consulting. We've tried to provide our thoughts on the two benchmarking issues here. And it's really about aligning the benchmarks with the roles of the asset classes and how they're managed. We've cited some of the Investment Beliefs, but I want to really point out one of the sub-beliefs that Calpers will diversify its portfolio into distinct risk factors.

I guess I would say that there's sort of an unstated, but no more than necessary, included there. You could continue to slice and dice risk factors where they would be distinct, but meaningless.

And so I think this really tries to get to that issue.

Also importantly, I want to point out the sub-bullet that should reflect -- the investments should reflect the time horizon and the size of the assets. And as the markets continue to evolve, as CalPERS portfolio continues to evolve, the size of the assets continues to be more and more of an issue in some areas like private equity, given what's happening in the overall market in private equity, whether it's now three-quarters of a trillion dollars of dry powder, which is pretty astonishing.

So sort of taking them in the same order that we commented on them in the opinion letter. Real assets, the proposal is to combine the entire Real Assets Program under one benchmark, the real estate benchmark. We supportive of that. I think practically speaking right now, you know, you're talking about 17 percent of the benchmark that is not already the real estate benchmark. So it's a 17 percent of 13 percent. I can't do the math on the fly, but it's not that big a deal I think is the

point that I'm trying to make.

But I think the important thing to take away from this is that it begins to make infrastructure and forestland compete with real estate for capital in the portfolio. And while infrastructure has been -- if you look at the returns, it's been a raging success for Calpers. The only drawback is you haven't had more money in it, right?

And so I applaud staff for not throwing money at opportunities sort of willy-nilly and ending up with bad investments, or things that have harmed the portfolio, but I think if the hurdle instead of some return rate had been beat on a risk-adjusted basis, real estate, you'd probably likely have a much larger infrastructure portfolio right now. You would have been more competitive in some of the bidding.

And this is a -- this is a place where you came into the market, you were probably ahead of most people, but the market caught up very quickly and suddenly was much more competitive. So I think making opportunities compete for a place in an overall portfolio makes a lot of sense there.

The other point that I would note here is obviously if that takes place, and suddenly infrastructure is no longer one percent of the portfolio but it's four

percent of the portfolio, the total portfolio, we can change that benchmarks again later to reflect that.

That -- honestly, that would be a good problem to have, I think, given the characteristics of infrastructure.

With respect to private equity, the biggest change here is just making the benchmark match the global equity benchmark, instead of two-thirds one-third. There are some nuances there that I think it's probably appropriate for Meketa to comment on. But you're de-emphasizing the U.S. market relative to the non-U.S. market, so you're moving dollars out of the biggest market -- the biggest private equity market in the world. It also happens to be the most developed and most competitive where pricing is pretty tough. But the pricing really isn't much better overseas.

Those are smaller markets, less developed, fewer deals, less competitive, but it does begin to align the private equity program more closely with the public equity program, which would allow for, in a subsequent step, which is really not -- it's not proposed at this moment. We're just talking about the benchmarks -- would be again having capital -- having deals compete for capital in the program, right?

If -- if staff sort of unifies private equity, and public equity or -- that would be an Investment

Committee decision. If CalPERS unifies public equity and private equity into sort of one single growth asset class, I think then private equity deals have to compete with public equity. And if public equity, if staff has strong convictions about one particular niche in that market that they think is likely to outperform the broad benchmark, then a private equity deal has to compete with that.

And again, I think that's an effective way to deploy capital for CalPERS within obviously overall risk constraints. This doesn't -- this doesn't speak to changing risk constraints or anything like that. And then the last point that I'd make, and this is just to sort of hang it out there for future discussion, at last month's meeting during the staff presentation, in addition to this benchmark change, talked about the return premium being TBD.

Its currently three percent. It used to be five percent. I'm just noting that it's TBD. And this is another cases where CalPERS size, I think, can get in the way of an excess return that other people might be able to chase, perhaps even achieve, right?

If you're investing a billion dollar total fund and you've got \$100 million in private equity, you can -- you can do things that CalPERS simply can't do at \$300 billion. So I know that will be out there for a future

discuss, but I didn't want to let this opportunity go without at least noting that that's coming.

And I'll stop there and I'm happy to take any questions

CHAIRPERSON JONES: Yeah. We have a few questions.

Mr. Lind.

COMMITTEE MEMBER LIND: Thank you.

Thank you, Andrew. I was going to ask you about the TBD question, which you just addressed. I had one other question maybe for staff. You pointed out in the Wilshire letter that combining into one bucket the private equity and the public equity, that private equity could act as an alpha driver in some cases, which makes sense. But then you go on to say additional governance and portfolio guidelines would need to be developed to control against these opportunities interfering with the risk profile. Ted, maybe you could just kind of comment on how that would come together, what that would look like?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well, first, we have to complete the ALM exercise. So I think that timetable is probably the most specific. And then looking forward, any changes to how we invest in the processes will really be more organic through our governance subcommittees that we've put in place.

And the main -- really, the main change in this benchmark change is we're trying to actually lift the pressure off of the private equity group to have to invest in any size or any region at all, and really have that portion of the portfolio focused on finding the very best managers, and the very best strategies across the globe, and have that be the key role of the staff in trying to select and find investment opportunities, rather than trying to have to match the benchmark profile, either from a sector or a -- or a geographic region.

So I think it will develop over time, and we'll be working with this committee to structure that.

COMMITTEE MEMBER LIND: And since Andrew raised the TBD question, I guess I'll -- what are -- where is that going right now? When is that conversation going to be further developed.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think

I'll turn -- I'll turn to -- turn to Eric who knows the timetable a little bit more specifically than I do. But one of the first opportunities to at least discuss it would be during the capital market assumption discussion next month.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Eric

Baggesen, Managing Investment Director, for Asset

Allocation. That's exactly right. The intent is to bring

the capital market assumption information back to you next month.

And that ultimately would constitute the actual action item that underlies all of this material that we put in front of you last month, and the consultant's opinions and perspective basically this month. And this is actually a little bit unusual, because we typically do not ask for a consultant opinion, except when we have an actual action item.

But all of this is substantive enough that we thought it was important that you had the opportunity to hear from your consultants, but it would be next month for the capital market assumptions.

COMMITTEE MEMBER LIND: Thanks, Eric.

Thank you, Mr. Chair.

CHAIRPERSON JONES: Andrew.

MR. JUNKIN: I just wanted to add one point about the TBD notion. And that is as it applies to asset allocation, barring some radical change like making the premium be negative, it really probably won't have any significant outcome on the actual asset allocation.

So having gone through these for 20-plus years, the optimization process always seeks out that high return very quickly. And so at any sort of reasonable return premium, I think you're going to be hitting the upper

constraint that's going to be sort of logically imposed by how big can we be in this market, rather than we no longer want to participate in private equity because of the return characteristics.

So I just wanted to clarify that point for uses when discussing asset allocation.

CHAIRPERSON JONES: Okay. Thank you.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Just a quick comment on the last one. If the return premium becomes negative, I know at least one Board member who's voting against it.

(Laughter.)

MR. JUNKIN: And one consultant.

14 (Laughter.)

COMMITTEE MEMBER JELINCIC: But let me go back to the bigger issue. Again, we are focusing on assets and not risks. Now, I realize our staff is structured, as is most of the world, on assets rather than risks, but we -- I have argued and will continue to argue that we need to move away from that and focus more on risks.

But the -- on real estate, I'm inclined to agree that, you know, forestland and infrastructure are too small to really make much of a difference at this point.

And so lumping them together makes some sense. Although when you point out that part of what it does is it means

that forest and infrastructure have to compete with real estate, and we would have more real estate if we had had a lower benchmark for infrastructure, I'm not sure that I'm really comfortable saying, well, we should lower our expectations in order to invest more. So that -- there's that issue.

Private equity, public equity same benchmark, I am not convinced that they are separate assets -- or I am convinced they are separate assets. And if they are separate assets, I'm not sure that it makes sense to say, yes, you're different assets, but no, you ought to have the same benchmark. You know, I'm not sure that that's really how you ought to be arranging it.

One of the arguments is that while that gives staff more flexibility to go private equity versus public equity, but when we have defined the targets, we have given them fairly significant ranges. And so there's nothing that currently stops them from making that choice.

So I'm not sure that's really a good argument for combining them. The argument that, well, it -- the -- you know, it would drive the investments by having them match the benchmark, which we have redefined, you know, if private equity really is an alpha driver, then it shouldn't be particularly worried about how closely it's tracking the benchmark. And I'm not sure that the current

benchmark for private equity really drives, you know, U.S. versus domestic versus, you know, any geography, you know, because it's a CPI plus. So I'm not -- so it's certainly not forcing investments in any particular area.

So I'm still not convinced that combining the two into one group -- one benchmark makes sense. And if you would care to comment on any of those, I would welcome your comments.

MR. JUNKIN: Yeah, I do have some comments. I think I probably left out a critical phrase when talking about competing for capital, and that is it has to compete on risk-adjusted basis, right? It's not just we can make 6 in this real estate deal and we can make 6.02 in this infrastructure deal. There has to be some adjustment for the risk in each opportunity.

So I think that that is a critical component, and leads me to your question -- your comment about private equity and public equity being different assets. I would go back to your prior comment about thinking of the world in terms of risks. And the risks that public equity and private equity face are overwhelmingly the same. The financing is a bit different, the timeliness of reporting is different. And in some cases, people have argued that private equity is a good diversifier for public equity simply because of the accounting mechanisms in place. I

think that's -- economically allows the argument, and it's not one that I would make.

While we haven't commented on the actual return assumptions or the risk assumptions that go with any of these assets classes or how they would work when combined, you know, we definitely view private equity as -- while having the same risk characteristics, the risk drivers as public equity, a higher level of risk, despite this accounting lunacy.

particularly the leverage, the focus on IRR, getting money up front, they really do, at least it seems to me they strike -- they have very different drivers. I mean, I -- we had a retail company a couple months ago that went bankrupt, that had been bought out by private equity. And the GP's comment was this was a really successful business or investment, because we got it three times return.

Well, they got three times return because they threw a significant amount of debt on it, and then used that to do a dividend recap and just look -- front-loaded it.

Now, the fact that it ultimately bankrupted the company says that it's not really being driven by growth.

And I think that has a negative impact on the economy as a whole, which has a negative impact over on our public equity at the margin. And so I'm -- I really need some

convincing that they're actually the same assets and subject to the same risks.

MR. JUNKIN: This -- I mean --

COMMITTEE MEMBER JELINCIC: And we're going to have lots of time to talk about.

MR. JUNKIN: Yeah, we can have this conversation for a very long. I think that, you know, GDP growth is what's going to support both public equity and private equity, barring someone putting way too much leverage on something, or there being some idiosyncratic change in a structure, or the revenue of a private equity company.

And we're rapidly exhausting my private equity expertise. And so I -- you know, I point the finger at Meketa. At some point, they'll be here.

(Laughter.)

MR. JUNKIN: But -- but I do think that -- COMMITTEE MEMBER JELINCIC: They're sitting back laughing at you.

(Laughter.)

MR. JUNKIN: Yeah, I'm sure that they are.

But I -- we've gone through this a lot. And Steve is here. We'll have plenty of different conversations about this in the lead up to the asset liability workshop. But our view is that really -- and frankly, I'll even throw high yield in there. You know,

high yield bonds --

2.4

COMMITTEE MEMBER JELINCIC: Yeah, if you didn't, I was going to.

MR. JUNKIN: -- and we've had that discussion in prior ALM discussions. Are they fixed income or are they kind of driven by the same drivers as equities? So we have those discussions internally at Wilshire pretty much every time we have breakfast, lunch, or dinner together, so...

COMMITTEE MEMBER JELINCIC: Well, but again in fixed income, even spread product is, to some extent, driven by growth.

MR. JUNKIN: Yeah.

COMMITTEE MEMBER JELINCIC: Because if the economy tanks, that spread product is going to have serious problems.

MR. JUNKIN: Yeah, I think we, Wilshire, really look at two primary risks in the economy, and it's growth -- it's global GDP growth and inflation.

And when you distill the world into those two factors -- and we've debated is two right, is three right, is nine right? We've settled on two. And then you look at private equity versus public equity, they're very similar.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Okay. Ms. Mathur.

COMMITTEE MEMBER MATHUR: Thank you, Mr. Chair.

I guess I would suggest, I'd really like to hear from all of the consultants and my questions probably can be addressed by any -- by a number of them. So may I suggest that we have the consultants continue their reports and then we turn back to questions?

CHAIRPERSON JONES: Sure. Sure.

COMMITTEE MEMBER MATHUR: Would that be

10 | acceptable?

COMMITTEE MEMBER MATHUR: Thank you.

12 CHAIRPERSON JONES: Who's next.

MS. FIELDS: I believe it's me. Christy Fields, PCA. And our opinion relates to the real asset benchmark. And our opinion is congruent with that expressed by Wilshire, and primarily informed by the broadly similar roles that the underlying subasset classes play for the Real Asset Program, for the lack, generally, of a perfect -- or more perfect private benchmark, and is the case for simplicity, and the relatively tight fit between the proposed benchmark and the role of the underlying assets in this program.

And third, the availability of some additional operational efficiencies associated with the MSCI IPD benchmark and data.

So I'll keep it brief.

CHAIRPERSON JONES: Okay. Meketa.

MR. McCOURT: Steve McCourt, Meketa Investment Group. And I'm going to be discussing simply the private equity component of the staff recommendation, which relates to the recommendation to change the base index of the private equity benchmark from -- in an index that currently is 67 percent U.S. equities, 33 percent international equities to a cap-weighted index, which is roughly 50/50 over time.

In our memorandum, we provide analysis that shows the differences in regional composition of the two different base indexes. We provide historical analysis of returns and risks in correlation of the two types of base indexes. We provide our foward-looking expectations of risk and return of the two base indexes. The summary of all that is the difference between the two base index is more or less immaterial.

On a forward-looking basis, which I think is the most important, the most meaningful difference is that the recommended base index has a higher allocation to emerging market equities, which not all, but most, would consider somewhat higher returning, higher risk assets.

And so, as you look at your asset liability modeling, the forward-looking risk and return of the

benchmark that would be used would be slightly higher, both risk and return.

We -- we're fine with the change in the base index. We don't think it's meaningful. What is going to be meaningful is the selection of a premium on top of that index. And so I think that's where there's a lot more leeway for debate and different perspectives on the right level of the premium. And just to sort of foreshadow our message during that dialogue, in our opinion, the benchmark, which is the combination of the base index and the premium should reflect the return that the average institutional investor like CalPERS should be able to extract from the asset class. It shouldn't necessarily reflect what staff can do.

And so I think it's -- it should, like the other asset classes, reflect what ultimately is the beta or the reasonable return that you can expect by investing with institutional standards in the asset class.

CHAIRPERSON JONES: Okay. Thank you.

StepStone, if you could come over here, so that if -- why don't you stay PCA, and have him -- in case a question is directed to you, you'll be here at the table.

MR. MITCHELL: Damien Mitchell from StepStone.

I guess we had a relatively simple task with respect to the infrastructure benchmark, because for the

1 most part, there is limited appropriate alternatives.

2 We've spent a bunch of time over the years determining

3 whether there's a public or a private benchmark that would

4 be suitable one for this purpose.

But I think at least for now, given the relative lack of data, the relative infancy of the asset class, that there just isn't one for now. So our recommendation is that this -- the staff and the Board continue to

CHAIRPERSON JONES: Okay. Thank you. So now we will go to questions. And if Committee members will

reevaluate as those benchmarks become more robust.

12 direct their questions to the specific person, so they

13 know who the question is directed to.

Mrs. Yee.

5

6

7

8

9

10

11

14

16

21

22

15 COMMITTEE MEMBER YEE: Priya.

CHAIRPERSON JONES: Oh, you moved. Okay.

17 COMMITTEE MEMBER MATHUR: You turned me off, but

18 | I had some questions.

19 CHAIRPERSON JONES: Okay. You want to go back

20 Okay. Hold on a minute.

Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you.

23 So a couple of things for Mr. McCourt from

24 | Meketa. One is are you concerned at all that a move to a

25 | more global cap-weighted index for private equity would

spur -- would spur inappropriate investment in emerging markets, where there are perhaps less protections for investors and other risk factors that we need to consider? Does that concern you at all, and how would you suggest that we protect against that?

MR. McCOURT: Sure. I think it's worth monitoring. I'm not sure it elevates to a level of concern in my mind. The reality is you've had higher levels of emerging market investment in your Private Equity Program relative to the existing benchmark. So there's nothing about the benchmark that has historically caused you to be less invested in those areas.

But I would suggest the private equity staff continually look at the elevated risks and opportunities in the emerging markets and review those in the context of broader opportunities that they see.

I'll also echo for staff what they had mentioned at the last meeting, which is I think part of their rationale for integrating these two asset classes. If there are good managers who happen to be in emerging markets and provide you exposure in emerging markets through private equity, the global equity portfolio manager will have an ability to modify the fund-wide emerging markets allocation by underweighting emerging markets in the public equities.

So that overall exposure should be monitored, but there's nothing about the benchmark change that would cause me concern about the emerging markets allocation.

COMMITTEE MEMBER MATHUR: Okay. And then a second question is, as you noted, you foreshadowed that you -- you really think we need to lower the premium over the base index. And I guess my concern is the interplay between sort of fees in this space -- in the private equity space and that premium. And if you have any preliminary thoughts about that?

MR. McCOURT: As long as I can hide under the umbrella of preliminary, my suggestion is the Board -- as the Board looks at not just private equity, but all the private market asset classes, and, with staff, attempts to come up with objective and reasonable long-term expected returns, think about the returns that asset classes can generate, not just on a net-of-fee basis, put more importantly in the private markets asset classes on a gross-of-fee basis.

And then after you've determined what the gross-of-fee return expectation is based on interest rates, and growth rates, and reasonable economic characteristics, then you can -- you can determine what's a reasonable amount of fees and expenses that one would expect could come out of those asset classes.

And I think that, in essence, adding back in the fees and expenses to take a look at the gross return expectations will -- will allow the Board and the staff to really think hard about the -- where returns come from, where risks come from, and really focus appropriately on reducing fees as a meaningful way to improve long-term return.

COMMITTEE MEMBER MATHUR: Thank you. I also have a question, and I'm not really sure if it's for Christy or for Daniel[sic] actually, about sort of the real estate infrastructure combined -- you know, having a single benchmark.

And I guess it's following on a bit on what Mr. Jelincic was taking about earlier about, well, do we really want to reduce our return expectations in infrastructure if the risk characteristics and other factors are substantially different from real estate?

And so I guess would -- maybe it's for you really, Daniel[sic], but what -- have you -- what are your thoughts on that? I don't know that your letter exactly addressed that question.

MR. MITCHELL: I'm providing real estate and infrastructure -- infrastructure into that benchmark.

COMMITTEE MEMBER MATHUR: Into a single benchmark, and what that would mean to, you know, the

risk-adjusted return of infrastructure projects in our portfolio?

MR. MITCHELL: Yeah. I mean, I think the -- that the market in infrastructure -- and to be honest, I'm not real -- not very familiar with the real estate asset class. I've been in infrastructure most of my career, so I apologize in advance.

I think the infrastructure asset class is increasingly competitive, and despite the fact that, I think, your program has been incredibly successful. And I think -- also, I think one other speaker mentioned earlier, there is a growing interest in the sector and a lot more competition.

So I think, in some ways, you -- it depends on whether you want exposure to that asset class or not, but I think unfortunately their terms are getting tighter and you have to be competitive. And to actually invest, you probably have to be at lower benchmark returns to be successful. So it depends on whether you want to allocate or not to the space. If that's helpful.

COMMITTEE MEMBER MATHUR: Okay. Thank you.
CHAIRPERSON JONES: Okay. Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

I guess at the outset, I just want to thank everyone for all the work that's being done here. It'

a -- this discussion is really worth having, and I -particularly given that, you know, we're constantly under
pressure to meet the target allocation in private equity,
and to be able to have a little bit more expansive
thinking with respect to where we can go with private
equity, I really appreciate.

A question with respect to if we were to pursue opportunities internationally, what do we know about the fee structure in markets outside the United States? Is It pretty similar or are there differences?

MR. McCOURT: Is that for private equity you're talking about?

COMMITTEE MEMBER YEE: Yes.

MR. McCOURT: The structures are the same. The variability across funds in fees is wider, and you have somewhat fewer larger managers, particularly when you get into the emerging markets that, unlike some larger managers in the U.S., are unable to provide the economic scale to LPs that larger investors here can.

So without knowing the specific numbers, one would expect that the aggregate fees are going to be somewhat higher outside the U.S. How much higher is a bit difficult to predict.

COMMITTEE MEMBER YEE: Okay. All right. And I want -- also wanted to echo Ms. Mathur's concerns. I

mean, obviously, going into other markets where there are kind of new risks and vulnerabilities, I don't want to underplay those, because I do think that it's going to be very tough to reach an objective benchmark to measure, you know, the returns, you know, against the risks that we take.

So I'd like to just not give that short shrift, because it's going to be part of the overall experience that we're going to have globally, and our eyes should be open as we venture out.

Okay. Thank you.

CHAIRPERSON JONES: Thank you.

Mr. Bilbrey.

COMMITTEE MEMBER BILBREY: Thank you, Mr. Chair.

I think my question has been answered regarding fees. That was where I was going. Ultimately, are -- I mean, obviously, everybody is asking about fees, because we'd ultimately like to know if fees will be lower, what the changes we're making, or if there's an opportunity. Would that be fair to say? I know you just said something about being, hiring but I jut want it to be clear.

MR. McCOURT: There is -- there's nothing about the benchmark change that would cause me to believe that geographic distribution of your private equity will change directly as a result. And I would imagine that staff's

efforts to reduce fees will continue across all geographies.

COMMITTEE MEMBER BILBREY: Thank you.

CHAIRPERSON JONES: Okay. Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you.

I sort of want to echo what Ms. Mathur and Ms. Yee were talking about as well. I think we should very much keep that in mind, but I guess I'm -- I just find it fascinating that all of our consultants agree. And I think the question I had was are there similar institutions of size and makeup that we've looked at that are using this, and -- because it is different?

And then kind of why would we do this. We're still kind of ending up with a real question mark as to what that rate of return is, kind of like we were before, especially in private equity.

So, are we comparing -- are we using something that someone else has already tried, and -- or is this something that our office -- our INVO office has decided -- thought up? Is it new creative ways of thinking of returns? I just -- I was curious about that.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Maybe I'll start off.

COMMITTEE MEMBER TAYLOR: Yeah, thanks, Ted.

25 Sorry.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I don't have -- I want to make sure your consultants are available to you first off.

There's no perfect benchmark in the private asset classes particularly.

COMMITTEE MEMBER TAYLOR: Right.

CHIEF INVESTMENT OFFICER ELIOPOULOS: So you're -- you're -- CalPERS and other institutional investors are -- really look to a few broad categories of benchmark types to choose from, which have all been discussed here today and previously. You can look to an absolute return benchmark in infrastructure. We -- that's what we've used previously, a CPI plus an increment above CPI. So you're looking to beat a number in this case.

That has its strengths and weaknesses. There's some clarity to it. And certainly it hopefully aligns to your return objectives for that asset class. But no asset class can guarantee a steady single-digit return day-in day-out year-in year-out. So it's a significant weakness to have an absolute return benchmark.

And by the way, CalPERS and every other institutional investor has tried every different version of these categories just to let you know, to give you some comfort. So absolute return.

Another category is peer benchmark, so you can

look to benchmark yourself versus other similarly situated peers. In the case of CalSTRS, for instance, they -- in private equity, they've chosen a peer index approach to measure, you know, themselves. In there you're measuring yourself well how did others do trying to invest in the same marketplace.

COMMITTEE MEMBER TAYLOR: How successful has that been for them?

CHIEF INVESTMENT OFFICER ELIOPOULOS: It's very new.

COMMITTEE MEMBER TAYLOR: It's very -- so they just started.

CHIEF INVESTMENT OFFICER ELIOPOULOS: So they've just started that. And the pros and cons of each of these categories are fairly well understood. And over time, you know, the benefit of having a peer benchmark is, you know, how did -- what's the skill of your staff in meeting or outperforming or underperforming others trying to do the same thing.

The weakness of a peer benchmark is, well, what does it have to do with your overall return and risk expectations, what you're actually trying to achieve?

And then as a result, the third category are these sort of relative benchmarks. How do you perform, you know, relative to another benchmark that hopefully has

some of the similar return and risk characteristics as what you're trying to achieve?

2.4

COMMITTEE MEMBER TAYLOR: So then what you're saying -- I guess what I'm asking is we're combining -- we're combining like infrastructure and real estate, we're combining private equity and public equity to do our benchmarking, which is new for us, right?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well, we're picking -- it's new with respect to -- it's a different benchmark for infrastructure. We're moving from a absolute return benchmark to a relative return benchmark. So that's new, but we have lots of experience with that in our Real Estate Program. We've used a relative return benchmark in real estate for 25 years.

So that part is not new to us. It's new in applying it to infrastructure.

COMMITTEE MEMBER TAYLOR: Infrastructure, yeah.

CHIEF INVESTMENT OFFICER ELIOPOULOS: So these are -- I don't want to call them marginal tweaks, but they are with respect to infrastructure and forestland, since they're so small a part of our overall portfolio. And I think that's what convinces most of us that this change, for efficiency's sake, makes sense.

On private equity, it's also a choice to move to a comparison with not just a relative benchmark, our

basically our overall stock portfolio, but our opportunity set. You know, what would we invest if we weren't investing in private equity? Well, that answer is pretty clear. It's our global equity stock portfolio.

And we think that marginally gives us a better fit to what we're trying to accomplish, but it's a judgment call. And every single institutional investor, I think, has picked one version or another of the peer, and absolute, and relative benchmark over time, and never settled on just one. We think, given where CalPERS is today, that this is the best fit for what we're trying to achieve.

But I don't think from staff's perspective, and certainly from the consultant's perspective, that there's any one perfect benchmark, particularly in the private asset classes, which are fairly new and emerging.

COMMITTEE MEMBER TAYLOR: Okay. Thank you. CHAIRPERSON JONES: Okay. Mr. Lind.

COMMITTEE MEMBER LIND: Thank you. First, I just wanted to say I strongly lean towards supporting this, I guess, segmenting approach that we've been talking about today. I do -- with respect to the PCA letter, I wanted to thank PCA -- this was regarding the real assets piece. PCA pointed out this change in benchmark would only apply to the ALM process and would not change the benchmark used

for performance and/or staff compensation, which is a nuance that I did not understand.

that?

I mean, as far as I know, a benchmark is a benchmark, is a benchmark. Kind of multi-purpose. But then you go on later in the letter to say that it's important that the Board consider the ramifications of that.

So could you or maybe staff just have a -- just start to have a conversation of what possible ramifications there could be?

MS. FIELDS: Christy Fields.

I think we just did want to draw attention and make -- be very clear that this was something new, that we were having two different benchmarks for -- to serve different purposes. And they're just natural consequences to having a two different benchmarks for two different purposes when you've got one trying to identify the role for ALM purposes and another one, you know, that very much impacts the human element, staff, in their compensation, and their performance reporting. So I think it's just something that we keep an eye on and monitor over time.

COMMITTEE MEMBER LIND: Ted, any thoughts on

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think that's exactly right. I think, one, the focus to set the

ALM benchmarks is important, I think, to keep in isolation to try and find the best fit to measure our performance over time from our expected goals for the portfolio.

Separately, it will be important during the Performance and Comp Committee's discussions to evaluate, well, how do you -- how do you want to compensate staff and on what basis? And that has its own set of inquiries. The Committee I think just came -- came through a fairly intense review of that, and chose to really evaluate staff on a number of dimensions that are in addition to just these strict performance results.

So they really are two different inquiries, but they do -- they do relate. But I think it's best to take them up in two separate forums.

COMMITTEE MEMBER LIND: Thanks.

CHAIRPERSON JONES: Okay.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: I want to follow up on Ron's point. The -- you know, the comment that this will not change the benchmark used for performance. As you may be aware, I'm not allowed to participate in the Perf And comp on performance.

But from what I've seen publicly, isn't the -don't we use the benchmark as a significant part of the
compensation? And what is significant varies from class

to class. But -- so I was somewhat confused by that.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Wylie Tollette, Investment Office staff.

That's right, Mr. Jelincic, we do use the benchmarks as a component of the current incentive comp plan. As you said, it varies by asset class.

I think what our understanding is, is there's no restriction on using the exact same benchmark for both. It's just that we -- in the agenda items and in this consideration, we wanted to make sure that the authorities the make those decisions were sort of properly -- properly assigned where the Investment Committee decides on the ALM, and Perf and Comp Committee decides on what should be used to incent staff.

So the Perf and Comp Committee could decide that the benchmarks used for the ALM are -- should be, in fact, the same for incentive comp.

COMMITTEE MEMBER JELINCIC: Okay. And then,
Andrew, you talked about our size being a disadvantage in
private equity, that there are things that a small fund
can do that we can't do, in terms of getting some excess
alpha. I would assume, and would like your comments, on
whether, in some cases, it can be an advantage in private
equity to be the size that we are. And if we cannot get
the excess returns that that asset class offers, why

should we be in there?

MR. JUNKIN: I think this is one of those ways that the market has grown up around you. In the past, in the early days of CalPERS' Private Equity Program, the private equity marketplace was far less saturated, it was less institutionalized. You didn't have the same kind of competition for slots in funds offered by private equity managers that you do today.

So I would say historically your size probably was an advantage, because people came to you looking for large allocations that would essentially make their fund with an allocation from CalPERS. They don't have to make their fund with an allocation from CalPERS anymore. And in fact, in many cases, I suspect that -- and this goes back to negotiating fees, there's some point at which they'll just walk away, because they know they can fill the fund without CalPERS.

So the market has changed. And I think that CalPERS size is, in that particular market, more of a hindrance now than a help, and in the past it probably was the reverse.

In real assets, I think it's less of a hindrance, but changes the game. You can't really be looking at 10 or 20 million dollar strip malls when you've got that much money to get deployed. So you can participate in deals

that other people can't, but for through a fund. So I think in that case, and in the case of infrastructure, which would sort of be, again, competing for capital under this arrangement, I think it -- it begins to be at worst a push, and in many cases a tailwind for you.

Did that answer your question?

I feel like I skipped part of your question, and I can't remember it. I didn't write it down.

COMMITTEE MEMBER JELINCIC: No, you addressed it.

MR. JUNKIN: Okay. Can I -- can I bounce back

to --

COMMITTEE MEMBER JELINCIC: Oh, the other -- the other -- I guess there was another part, and that was should we be in the asset class, but I think you answered that in the course of answering the other two.

MR. JUNKIN: Yeah. I think -- I mean, logically you're tying up capital for a long period of time relative to, you know, how most people view time, right. Relative to CalPERS, ten years is not all that long necessarily.

The fees are high. It's less transparent. You all are operating in an environment where transparency and low fees, you know, those are positive attributes to have. So if you're not going to be compensated for taking on some of the characteristics of private equity -- and this is true of any investor. If you're not going to be

compensated for those risks, why are you doing it?

So if that return premium were, you know, 50 basis points, I don't know why you'd do it. And I'm picking a number out of a hat, I hope 50 wasn't the number that you guys were headed towards.

(Laughter.)

MR. JUNKIN: Can I -- can I bounce back to the benchmarking question just for a moment?

CHAIRPERSON JONES: Sure, go ahead.

MR. JUNKIN: Okay. While we are talking about this discussion for asset allocation purposes, I think it would be illogical to not assume that the benchmarks for the total fund, and consequently for incentive compensation, don't head in the same direction. You wouldn't want to set up a conflict inadvertently. And let's just take the real assets combination where everything moves towards a real estate benchmark. If that were the benchmark that were used for asset allocation, it would make sense to use that for total fund reporting. But if you kept incentive comp on this 83, eight and a half, eight and a half, you could have incentivized behaviors that don't look like your benchmark component for that, which I think doesn't make sense.

So while we are specifically talking about what we're going to use for the asset allocation project, I

think you should have in mind that, you know, barring something unforeseen along the way, that's likely where this road would lead with plenty of opportunities to discuss along the way.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Mr. Junkin, if I could just add, because I don't want to make sure I didn't confuse the discussion. My point on the perf and comp is that you have some other benchmarks that you can look to, particularly peer based, absolute return. And the Committee has used those in addition to the relative performance one. It would be illogical to have different benchmarks for that slice of it, but the Committee doesn't have to choose to have 100 percent of the performance comp tied to that type of a benchmark.

And, in fact, the Performance and Comp Committee has chosen to have a wide array of comparisons to use.

And that's -- that's the choices that the Perf and Comp

Committee has in front of it.

CHAIRPERSON JONES: Right. And I think it's important that reading through all of the consultant's comments and briefings that the compensation is going to be a track that we're going to go down. So it's -- we can't resolve that here, but I think all of you said in your opinion letters, and also Ted, that that's going to be another track that we have to go down. So we can go --

move on.

1

3

4

5

6

8

9

13

21

2 Ms. Hollinger.

COMMITTEE MEMBER HOLLINGER: Yeah. Thank you.

COMMITTEE MEMBER JELINCIC: Wait. I wasn't done.

CHAIRPERSON JONES: Okay. Mr. -- go ahead.

COMMITTEE MEMBER JELINCIC: Steve, Meketa, the --

7 | in your -- in your presentation you talked about

cap-weighted index -- and I hate them and we've had that

discussion. But on three of four of your presentation,

10 | industry exposure, 58 of the iPad, where does finance fit

11 | in that table?

MR. McCOURT: I'll have to get back to you that.

There's no finance sector in there.

14 COMMITTEE MEMBER JELINCIC: Okay. And in your

15 | initial presentation, you talked about one of the

16 | advantages of changing the benchmark is that it's more

17 | international. We would create greater exposure to

18 emerging markets. And then in response to I think it was

19 | Priya's question, you said, well, you didn't think that

20 the change of benchmark would change the compensation of

the portfolio. And that's -- so it seems -- it seems to

22 be a contradiction. Can you reconcile?

23 MR. McCOURT: Sure. And just for clarity, I'm

24 | not sure moving the base index to one that's a bit more

25 | international is either a disadvantage or an advantage.

It's just different.

My point, in responding to Priya's question on emerging markets is that the existing portfolio has had a significant weight in emerging market private equity, despite the fact that it's benchmark historically has had a rather low allocation to emerging markets. So the staff historically has been free and willing to allocate to geographies where they see the opportunity. And they would, I presume, continue to feel free to allocate capital in such a way.

The other -- the other note I made was simply echoing staff's comments from the last meeting that, to the extent that the private equity staff finds opportunities in geographies that appear overweighted versus the benchmark, the -- if private equity is within the global equity asset class, staff can then underweight those geographies in the public markets portfolio to, in essence, neutralize that overweight at the total fund level. So I think staff would argue that they -- they're able to control that risk factor better with private equity included within global equity.

COMMITTEE MEMBER JELINCIC: Okay. And then you commented on fees ex-U.S. All the academic work I've seen says that fees, at least in Europe, are lower in part because of the greater disclosure frequently mandated by

government. So I would encourage you to take a look at that.

And then I don't want you to feel left out. If the -- if the infrastructure portfolio were bigger, so it actually was making a significant impact, what would you recommend in terms of a benchmark?

MR. MITCHELL: Thank you.

I actually think that it's more a function not of the size of the portfolio, but the benchmarks that are available. So I think there's a real struggle to get an infrastructure either public or private benchmark that is actually robust at this time.

So, for example, in the public arena, many of the infrastructure companies that are in the indices heavily energy weighted, for example, but have direct or indirect commodity exposure, which is something that typically people don't take in a private infrastructure portfolio or in transportation, for example, you have EPC companies that are an important part of the infrastructure benchmark, which is not typically a risk that they will take in a private infrastructure portfolio.

And then on the private side, there is just not many data points, because the asset is relatively immature. So I don't think there's a great benchmark. To Ted's point, quite often we see people use absolute return

benchmarks. To the extent they use peer or other, then
the volatility in those benchmarks, I think, are
frustrating for staff, because it means they're in or out
of the market at various times when infrastructure has
been relatively steady in terms of at least the returns
that its demanded from investors. So I think for now at
least there isn't -- there isn't a great benchmark in

COMMITTEE MEMBER JELINCIC: And I'm aware that EDHEC, Hong Kong, is working on an infrastructure benchmark. Have you followed that at all, and are they making any progress?

MR. MITCHELL: The -- you said -- pardon me?

COMMITTEE MEMBER JELINCIC: EDHEC.

MR. MITCHELL: Yes, we have been following it. We haven't seen any results just yet, but I think they started up in December last year in earnest.

COMMITTEE MEMBER JELINCIC: Yeah, and I hope they succeed.

MR. MITCHELL: Yeah.

infrastructure.

COMMITTEE MEMBER JELINCIC: And the other issue you raised is that it's become -- infrastructure has become more competitive. And as it becomes more competitive, one would expect lower returns. And if there's lower returns, you know, how much do we chase that

asset class?

MR. MITCHELL: Well, from an asset liability matching point of view, there's a whole -- I mean, I'm sure there's a raft of benefits that you're all more very -- very much aware of. So certainly my accent is from Australia, not surprisingly. And Australian investors superannuation fund's bench fund equivalent have been in the class for 20 years or more.

So I think there's a -- there's reason -- a rationale to be in it. I'm not sure that it's going to get any cheaper any time soon, because there is going to be a lot of money that's going to be chasing it, but it does have benefits in an overall portfolio.

COMMITTEE MEMBER JELINCIC: Thank you.

And, Henry, I'm -- I am done this time

CHAIRPERSON JONES: Okay.

Ms. Hagen.

ACTING COMMITTEE MEMBER HAGEN: I'm sorry.

CHAIRPERSON JONES: Hold on. Just a minute.

Yes, it's on. Ms. Hollinger. I'm sorry.

21 COMMITTEE MEMBER HOLLINGER: That's okay. Thank

22 you.

I appreciate the report. I was going to say that I agree with Mr. Jelincic's point that risk needs to drive our allocation. I think we have to look at this

contextually. In 2008, we were 100 percent funded. That was based on, I believe, a benchmark at that time of eight percent. I wasn't on the Board. But it's nine years later, and we're at 65 percent funded, and that's based on a lower benchmark, and a maturing population, with -- where the fund -- where we're now cash flow negative.

So I really think we have to look at terms of risk in determining where we allocate dollars. And that was just my commentary. Thank you.

CHAIRPERSON JONES: Okay. Mr. Slaton.

Oh, Ms. Hagen. I'm sorry.

ACTING COMMITTEE MEMBER HAGEN: That's okay.

Thank you. So I -- listening to the conversation today, and reviewing the materials, I think the changes appear to make sense. But I do want to acknowledge a comment that Wilshire made in their opinion, and that's they recommend additional governance and portfolio guidelines, if we were to make these changes.

And so I would like to see in the June item, some recognition that those are -- will be provided or outlined, at least in summary form, so that the Committee is aware of that additional governance added.

CHAIRPERSON JONES: Okay. Ted.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think -- I'll just jump -- I think June will probably -- will be

too early to provide governance mechanics around -- around some of these changes, but we'll, you know, certainly take this feedback and see what we can provide in June and further into the ALM process. I don't know, Wylie, if you put some thought to it.

2.4

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: As Ted mentioned earlier, we have convened a project team consisting of folks from private equity, public equity, our compliance group, and our investment risk and performance team, as well as asset allocation, to work on exactly what you're describing, Ms. Hagen. And we actually anticipate it's going to take the bulk of the remainder of this fiscal year -- excuse me, the next fiscal year to construct that, so -- and we hope to -- we will definitely bring back those guidelines, and constraints, and policy recommendations prior to implementing actually any portfolio changes.

But as Ted mentioned, having them for the capital market assumptions in June will be -- I don't think we'll be able to hit that deadline.

ACTING COMMITTEE MEMBER HAGEN: Just assurance that -- that your staff is working on that and will have that in place would be satisfactory.

CHAIRPERSON JONES: Okay. Mr. Costigan.

These -- okay. Mr. Slaton.

I got one -- okay. I'm sorry.

VICE CHAIRPERSON SLATON: I think we'll get this straight eventually. Thank you, Mr. Chair. So my question is directed to staff, but maybe the consultants want to chime in on it. And I'm struck -- I'm looking at the last page of the cover letter that talks about benefits and risks. And we've talked a lot this morning about, you know, the materiality of the strategic asset allocation choices and better control of the resulting exposures, and better management of the risks derived from -- from idiosyncratic private equity activity.

But the last item on there, and this is where I'd like you to flesh out a little bit, particularly in terms of we -- what's the value received, because they're nice words to put in there called foster greater team work. But what do you see as the real value of that and how does that come back to enhancing our returns or our reduction of risk?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Eric Baggesen, Calpers staff. Let me take a shot at that question, Mr. Slaton.

I'm not sure that we know exactly what the value of that team work is. What I'd suggest though is that this organization has a legacy of the various parts of the portfolio, and the staff attached to those various parts,

operating really with a singular focus on those parts, and less of a focus on how those parts all add together to create an overall outcome for CalPERS.

When you sit here and you start to blur the lines between these assets segment and you start making the team a bit more interdependent, the intent is to elevate the outcome to the total fund in importance in the staff's eyes. That is not going to be a transformation that happens instantaneously. You literally have to start doing something different than what we have historically done, if you want to have that outcome as a cultural change, if you will, within the organization.

So it's unclear what that eventual payoff is.

But just as an example, currently, the private equity staff literally invests by trying to select the managers that they believe are going to do the best job deploying capital. They do not know what those managers are going to purchase with that capital. That may be just categorized, let's say geographically, potentially, or, you know, industry segment categorization.

The staff are unable to actually control the risk that come out of the Private Equity Program. If you recall, one of the slides that we presented last month showed the variability in the active risk in the Private Equity Program oscillating between over 1,000 basis points

of active risk down to 500. In other words, it was completely all over the place.

If you do something like merge private equity with public equities, you now have one is the risk control elements of the public equity team starting to infuse the things that happen within private equity. In other words, they actually have to operate as a team trying to achieve the excess return objectives while controlling the risks of the portfolio.

So that actually -- it implies a shift in the thinking of both the private equity team, and the public equity team. What happens in that shift is unclear.

The one thing that we do I think have pretty good evidence of is that you will not get that cultural shift unless you actually do something different than the way we have categorized this in the past.

So I would suggest that a big element in a lot of the activities and the suggestions that you see is an effort to try to shift the culture of the investment operation and get people more focused on the overall outcome to the plan, and less concerned about what happens in any individual bucket, which has been basically the historic focus of these teams.

VICE CHAIRPERSON SLATON: So what I hear you saying is although one could do this also in the

```
1
    compensation plan, you're saying that the organizational
    structure needs to be aligned with it --
 2
 3
             MANAGING INVESTMENT DIRECTOR BAGGESEN: (Nods
 4
   head.)
5
             VICE CHAIRPERSON SLATON: -- rather than trying
6
    to do it only through comp.
7
             MANAGING INVESTMENT DIRECTOR BAGGESEN: I think
8
    that's exactly correct.
9
             VICE CHAIRPERSON SLATON: Okay.
                                              Thank you.
10
             CHAIRPERSON JONES: Okay. Thank you for that
   discussion, and --
11
             COMMITTEE MEMBER COSTIGAN: Mr. Chair.
12
13
             CHAIRPERSON JONES: Go ahead, Mr. Costigan.
14
             COMMITTEE MEMBER COSTIGAN: I know, Mr. Jones, we
15
    want to move on to some other items. So rather than just
16
    repeating, just a couple observations.
17
             First, I appreciate the work and the good
18
                 I just want to make sure all the consultants
   discussion.
19
    are in agreement this is the best step forward, is that
20
    correct, based on the way I read it?
21
             (Heads nodding.)
22
             COMMITTEE MEMBER COSTIGAN: Okay. So the other
23
    thing I just want to make is a little bit, I guess,
24
    concerning for me it relates to compensation. I hear this
```

that somehow this is about increasing compensation.

25

just again want to make it clear to the Investment staff, we've taken up the issue before. When I look at what you all are paid, vis-à-vis our friends at the University of California, or in the private sector, you are vastly underpaid.

I find this line of questioning or line of rationale that somehow we are manipulating a benchmark in order to increase compensation to be somewhat unfathomable. There are multiple benchmarks. There are multiple layers. There's multiple issues of transparency. And I certainly hope this sort of red herring discussion that we're having just ends.

When I look at the compensation issues -- and I think I've heard it four times we've talked about it, that we're changing the benchmark in order to increase bonuses, that we're somehow hiding something, Mr. Jones, I just think is inaccurate. I know we're going to set some of this straight later this afternoon. I intend to address some of this tomorrow at Finance and Admin.

But I just want to say, one, if all the consultants are in agreement -- and I understand you're not going to put at risk your contract just to have it at CalPERS to tell us to do something that you don't believe is accurate, because your other clients are looking. And I look to you all for this.

So again, I just am a little concerned, Mr.

Jones, that we lost a little bit of direction and get off on a red herring, because if we believe this is best for the system, best in the long term, best for transparency, best to achieve the overall objective, which again I think we often lose sight of in these discussions, is to ensure that we pay benefit that the members are entitled to, and this goes along those lines of helping us achieve that, I look forward to a further discussion.

So thank you, Mr. Jones.

CHAIRPERSON JONES: Yeah. Thank you for those comments, Mr. Costigan. And I echo those similar comments.

And that's why I'm -- we've had a very lengthy discussion, a lot of good exchange of information, input, views, et cetera. So that's why I'm not going to be asking that a series of directions be made to you on this subject, because one is compensation that I'll defer to the Compensation Committee Chair and Vice Chair sitting here to determine when would be the appropriate time to deal with that issue. So there's no direction from the Committee on that issue.

And the other one is the governance that Ms.

Hagen mentioned. I think that is something that we need to come back at some future date to talk about when do we

```
get there. But you've got a lot of work to do to get to that point before you can develop those kinds of governance structures.
```

So that's the only direction that I'm providing. I think the purpose of this was to hear the concerns and views of the Committee. And I think we've had a robust discussion. So that's setting the stage for our next step with our workshop. So I'm sure you will be responding to these very various viewpoints when we have that workshop coming up soon.

Okay. So thank you. And I think with that, we're going to take a 10-minute break before we embark upon the next item.

(Off record: 10:54 a.m.)

(Thereupon a recess was taken.)

(On record: 11:05 a.m.)

CHAIRPERSON JONES: I would like to reconvene the Investment Committee meeting, please.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think we're just waiting for Anne Simpson to take her seat.

21 CHAIRPERSON JONES: Okay. And here she comes. 22 All right.

Also, I would just like to acknowledge one of our former Board Members, Dr. George Diehr is in the audience. So welcome, George.

(Applause.)

CHAIRPERSON JONES: Okay. Moving on.

MANAGING INVESTMENT DIRECTOR BIENVENUE: All right. Dan Bienvenue, Managing Investment Director of Global Equity. And I'm joined, it seems like as usual, by Simiso Nzima, and Anne Simpson. Simiso, of course, is a member of the global equity team, and Anne, of course, is the Investment Director leading our sustainable investment team.

So the idea of this item really is just to give a mid-season sort of update as we go through proxy season on just the activities and outcomes that have been going on on the corporate governance and sustainable investment arena. So we'll give that update.

But before we get to that update, I just wanted to take a moment to let the Board know that Simiso was recently named the Investment Director for the corporate governance function within global equity. So congratulations to Simiso. And certainly, we're very happy when we see one of our internal staff measure competitively with what we see on the outside market. And so, along with being a new daddy, we have lots of congratulations to Simiso and the family.

So with that, I'll turn it over to Simiso to take us through the update.

INVESTMENT DIRECTOR NZIMA: Thank you, Chairman.

Good morning, Mr. Chairman, members of the Investment

Committee. Simiso Nzima, Investment Manager -- Investment

Director, Global Equity.

(Laughter.)

2.4

INVESTMENT DIRECTOR NZIMA: So I'm still getting used to this.

(Thereupon an overhead presentation was Presented as follows.)

INVESTMENT DIRECTOR NZIMA: So I'll jump straight into the presentation starting with slide 3 of the presentation.

--000--

INVESTMENT DIRECTOR NZIMA: The Investment

Committee is quite familiar with this slide, which shows really the distribution of company meetings total resolutions and how we've worked proxies on management and shareowner proposals.

As can be seen from this slide, the peak of the proxy season is during Q2. So we're right in the middle of the peak of proxy season. In Q1, we voted shares in about 1500 companies meetings.

I'll move on to slide 4.

--000--

INVESTMENT DIRECTOR NZIMA: This slide really

shows the notable highlights of the proxy season to date. I'll concentrate on two items here, the Wells Fargo vote as well as the shareowner proposals. At the Wells Fargo annual general meeting, CalPERS withheld votes from nine directors out of a Board of 15 for failure to provide oversight in light of the sales practices scandal in their retail banking division.

Four of the nine directors received shareowner support between 53 percent and 57 percent, and the other five they received shareowner support of 62 percent to 70 percent.

This is really low level support for directors, and especially so given that Berkshire Hathaway, which holds about nine and a half percent of Wells shares voted for all the directors. So by our own calculation when we looked at this and took out the Berkshire Hathaway shares both from the numerator and the denominator, three directors received less than majority vote for this scandal.

On shareowner proposals, what I want to highlight really is that staff has supported shareowner proposals related to indigenous people's rights, gender, equity pay, board diversity, climate risk reporting, and other good governance practices.

Move on to slide 5.

--000--

INVESTMENT DIRECTOR NZIMA: This slide really shows the shareowner campaigns that we are undertaking as staff. So I'll start with the proxy access campaign. Staff is running proxy solicitations on 21 proxy access proposals. To date, five proposals have been voted for, four of the five have passed with majority votes. The one that failed actually failed at 49 percent, so it was a high level of support, even though it failed. And the high water mark to date is 89 percent. So there's one where we got 89 percent support, which is really, really encouraging for us.

I'll move on to majority vote for director elections. Thirty-three out of the 50 companies that we engaged have either adopted or committed to adopting majority vote for director elections. And of the remaining 17 companies, these are at various stages of engagement. And we still have the option to file shareowner proposals, if these companies are not going to adopt majority vote for director elections. So again, this is something which is really encouraging for us.

But the best news really is on the climate risk reporting campaign. We are running proxy solicitations at 15 climate risk proposals. Year to date, there's about eight meetings that have been voted on. The average

support of -- on the seven of those meetings for climate risk reporting proposals has been 42 percent, which compares favorable to the 35 percent average support last year, and the sub-20 percent support in 2015.

So this momentum, we're really happy about this momentum. But what makes us even much more encouraged is what happened last week at Occidental Petroleum on Friday, the shareowner proposal, which we co-filed with Wespath and Nathan Cummings, received majority vote. This is the first time in the U.S. that a climate risk reporting proposal has actually passed. So this is really encouraging for us and -- means that going forward, we expect the momentum to carry on.

A second encouraging thing on the climate vote -on the climate risk reporting framework is what happened
at Exxon. Exxon has appointed a climate scientist to its
Board. We believe that this is because of the engagement
by shareowners asking the company and other companies to
have climate competent boards. So this is again something
which is pleasing for us.

On that note, I conclude my presentation. The rest of the slides really are just appendix. And I'll take any questions at this point.

CHAIRPERSON JONES: Okay. Thank you very much.

And again, congratulations on your promotion, and also

congratulations to the team on those big wins, Occidental Petroleum and Exxon. So we really appreciate all the work you're doing in that area, and hopefully we get some others to come along as we move forward.

So with that, Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you. I do want to note the notable progress that we've made on climate. I think this is the result of many years of work of the entire team. And I'm particularly proud of the Occidental vote, as you indicated, finally reached -- or surpassed 50 percent vote on that climate reporting resolution. So that was really a terrific coup. And that's, what, almost ten percent increase over last year's vote. So that's really important progress that we've made in just a year. So commendations on that.

I think it's really also important that we've taken up this Equator Principles issue at banks. Clearly that was highlighted by the DAPL issue that we looked at very closely this year. But it highlighted sort of a major failing of compliance and oversight within these banks. And so I'm -- I really commend the team for taking that issue up in a substantive way this year.

So a lot of good progress. I note -- I just want to ask you a question about one of the appendices. On page seven of this agenda item, you note 2017 shareowner

campaigns proxy solicitations. Now, this is not a full accounting of all of the shareowner campaigns that were undertaken.

2.4

I see a few things missing. So I guess I'm just curious is -- if you could clarify what this is meant to represent.

INVESTMENT DIRECTOR NZIMA: This represents where we're actually running proxy solicitations.

COMMITTEE MEMBER MATHUR: Where we ran the proxy?

INVESTMENT DIRECTOR NZIMA: Yes, where we're
running the proxy solicitation ourselves. So, yes.

COMMITTEE MEMBER MATHUR: Okay. Because there were a number of other shareowner campaigns that were undertaken where we played a supporting role, but that's not included in this.

INVESTMENT DIRECTOR NZIMA: That's not included here. What we included is just where we're actually running proxy solicitations.

COMMITTEE MEMBER MATHUR: Okay. And is a full accounting of that available somewhere? Do we keep track of that in a transparent public way of sort of all of the shareowner resolutions and how we vote on them all? We do, don't we?

INVESTMENT DIRECTOR NZIMA: We have the -- our votes are posted publicly, so anyone can go in and

actually see how we voted on different items, even though the ones that we're not soliciting for. So that's available on the public website.

COMMITTEE MEMBER MATHUR: On our website?

INVESTMENT DIRECTOR NZIMA: Yes.

COMMITTEE MEMBER MATHUR: Great. Okay. Thank you very much.

CHAIRPERSON JONES: Okay. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah, I also want to acknowledge that this is the result of years of effort.

And the fact that it is years of effort is part of the reason why corporate America seems to want to increase the threshold of votes needed to resubmit, because it's easier to, you know, kill it early, rather than have to come back and have people think about it.

But I want to ask about Chevron where we withdrew the proposal due to substantial implementation. What was the proposal? What did they agree to do? And, you know, this was a question that you should have been warned was coming.

INVESTMENT DIRECTOR NZIMA: Thank you for the question. So the proposal was the same as the climate risk reporting what we asked the company to do. This is one of the three proposals where we co-filed, which is Occidental, Chevron, and ExxonMobil. So what we're asking

to do is to actually produce a report on climate risk reporting really in line with the framework of the task force on climate-related financial disclosures.

We understand that -- I mean, the -- that framework is not yet finalized. Chevron did produce a report, which again, given that the benchmark that we're using for that report is not yet final, we felt that we'd rather withdraw -- a strategic withdrawal but continue to engage the company in terms of coming to that stage where once the task force framework is finalized, they can produce a report in line with that framework.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Okay. Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you.

I also want to congratulate you on your promotion and apparently a new child.

INVESTMENT DIRECTOR NZIMA: Thank you.

COMMITTEE MEMBER TAYLOR: So my question -- I had a couple of questions. First, I wanted to ask Anne, given how you so vehemently articulated, in our Diversity Form how we're kind of short on rights in terms of our proxies and stuff. So can you kind of go over for me how our proxy voting rights help, and what these initiatives we're working on, but how they manage -- help manage our long-term risk for the fund?

INVESTMENT DIRECTOR SIMPSON: Thank you. Anne Simpson from the Sustainable Investment Program.

I think we have good evidence that where we have strong investor rights, we're able to protect our capital when management might be getting off track. And there's good academic studies that those this. And I think also in our own experience through programs like the focus list. We've seen that that accountability that comes with investor rights is just one way to close the gap, what's known, you know, by economists, it's called agency theory.

And it's essentially accepting that when people are in a position of influence, if they're not accountable, their own view of the world can be what drives decisions. So if we have investor rights, it enables us to keep companies on track.

The beauty of the shareholder proposal I think is that it also allows investors to put forward specific issues. In other words, not going straight for the jugular, a vote against the Board directors, which might be not needed. I think the Cognex proposal on diversity is a great example, because that's actually got majority support. It's the first one this year. We had a couple last year as well. But that's drawing to the Board's own attention that it needs to tackle board refreshment and board diversity.

So the shareholder proposal process we think is very complementary to the ability to told directors accountable. And for that reason for a long time, CalPERS has argued in favor of annual elections, so that you can be timely when there's a crisis, for example, Wells Fargo, But also why majority voting is still so important, because if we're not able to vote against directors, we can only vote yes, then really the election is a pat on the back --

COMMITTEE MEMBER TAYLOR: Right.

INVESTMENT DIRECTOR SIMPSON: -- and not really a powerful mechanism for accountability, which is what we need for governance to be additive on risk management and also on occasion also a plus for returns.

COMMITTEE MEMBER TAYLOR: Thank you very much, Anne.

Also, I do want to congratulate you on your climate risk campaign. Just, it's amazing how far we've come, even since I started, which was what, two and a half years ago. So I am just incredibly excited to see trees companies get on board. And I know it's all thanks to you and your shop, and working so hard with -- in the proxy voting, et cetera, to have success there.

One of the questions that goes with that is do we see that because of this, even if the United States were

to pull out of the Paris climate change agreement, would we still see progress with these companies?

INVESTMENT DIRECTOR SIMPSON: Thank you. That's a very good question. The argument that we're making is that climate change is understood. It's based on science, and risk reporting is sound economics. Because if companies can't report on these risks, they can't manage them. And I think we see additional benefits for companies as we are continuing to talk to them, is also about opportunity.

And many of you will have seen the important letter that Exxon wrote on this arguing in favor of the Paris Agreement to say this internationally is going to help competitiveness, and highlighting some of the billions that they're investing, for example, in carbon capture technology.

So I think -- I think what we see is that actually the mindset of companies is beginning to shift from just being a defensive response, "No, reporting is a burden", to understanding, well, this is an opportunity to communicate about our strategy. And, you know, I think we're looking at companies like NRG, which have a fully developed 25-year transition plan. And it's encouraging that companies like Chevron are willing to meet us more than halfway, by, as Simiso says, producing a report which

gets us a long way towards the framework that the Financial Stability Board task force IS arguing for.

So I think these are -- these are exciting times, and I think that the market is driving the changes. And the opportunities are as powerful as the risk management side of the equation.

MANAGING INVESTMENT DIRECTOR BIENVENUE: Yeah.

The only thing I would add to that is, and Anne alluded to it, bear in mind that half of the global equity portfolio is international, so --

COMMITTEE MEMBER TAYLOR: Right.

MANAGING INVESTMENT DIRECTOR BIENVENUE: -- so only half is the U.S. Now, that has been the majority of our engagement activity, but that doesn't mean it has to be. And then additionally, remember right after the election, we had some discussions, and the question was, gosh, does his change our ESG strategic plan? And the candid answer was no, that, you know, Strategic Initiative number one is data and corporate reporting. Investors need that data to make good investment decisions, both from a risk and opportunities standpoint, and we don't see that changing.

So we're hopeful for a positive outcome.

However, either way this will be a critical issue for us.

COMMITTEE MEMBER TAYLOR: Great. And then

finally, and I hate to be so long-winded here, I had -- I just think it's awesome that you guys did so well with Wells Fargo and making sure -- and I just find it fascinating that these financial companies may or may not be signing on to the Equator Principles. And I'm glad that we were successful with that.

I just had a -- I just had a concern. We loan money, right?

Are we a signatory to the Equator Principles, and shouldn't we be if we're asking other companies to be?

CHIEF INVESTMENT OFFICER ELIOPOULOS: We're not a signatory. And I think we'd need to think about in the context of how much project finance lending that we do directly. And I think we're not very large, if at all, in that field. So that would be a question to think through in the future.

COMMITTEE MEMBER TAYLOR: Great. I'd appreciate it. Thank you.

CHAIRPERSON JONES: Okay. Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

A couple questions, and very, very excited about the progress we're making on the climate front. I guess with respect to the votes that didn't make it, what's the process going forward? Some came close, but is it elevating our engagement or is it kind of coming back, the

next round? I was just curious in terms of the continuing the momentum on this front.

INVESTMENT DIRECTOR NZIMA: Thank you for the question. The plan really is to go back. I think our expectation is once the framework, the FSB framework is in place. It makes it easier to go back to companies and actually say this is what we want you to actually adopt.

So we'll be going back and we'll be refiling some of these proposals. And I think part of that effort real is to work with other large institutional investors, other partners of ours to actually see, you know, some of these proposals passing.

And to that point, I mean, BlackRock did come out in public that they supported the Occidental proposal. So as we get more and more institutional investors to actually support some of these proposals, we think we actually are going to succeed going forward.

COMMITTEE MEMBER YEE: Okay.

INVESTMENT DIRECTOR SIMPSON: I just -- it's Anne Simpson again. I'd just like to add another point to what Simiso sets. All of the companies in the U.S. where we've been running campaigns this year are on our Global 100, which is one of the strategic initiatives in the five-year ESG plan.

So by taking on 17 of those companies in the

U.S., we've actually made a flying start on that engagement strategy. As you know, we had a recent planning meeting with the U.S. Ceres Investor Network to build consensus on the idea of a global alliance of investors around the world tackling the 100 companies which we consider are responsible for around half the greenhouse gas emissions associated with our portfolio.

Those are quite complex negotiations, because there's a lot of regional work going on. And what we want to make sure we do is build on that, not duplicate or substitute, but we're very -- I think we've made great progress on building consensus around the idea of the Financial Stability Board framework, as Simiso highlights. And if the networks which supported the Paris agreement came in around this strategy, it would be a very powerful market response.

So I think we're on track to be able to launch that initiative later this year. And I'd just like to thank the Controller for kindly chairing that discussion, which I think was very productive, and also for Ms. Mathur for PRI's support, because, of course, the Montreal Pledge, which PRI invented, was how we originally were able to do this analysis and get very focused attention.

So I think this all ties in with the strategic plan in a powerful way.

COMMITTEE MEMBER YEE: No, I agree, and I think that's really the way I'd like to have us look at it going forward, is that obviously we're going to continue to keep our hands on, you know, this engagement with the companies, but it's really a broader effort with respect to some of the other potential alliances down the road.

Okay. I was your curious about one of the votes, and that's with NRG Energy, because I wanted to kind of get a little bit into the thinking behind why we withheld the vote there? I mean, there was -- I know the two directors were identified as part of a settlement, but it's a little hard to kind of think about one of them being a publicly proclaimed climate denier, and yet we withheld the vote, but there were other considerations. I wanted to see if we could -- if you could elaborate on that a little bit.

INVESTMENT DIRECTOR NZIMA: Thank you for the question. So specific to this request -- and what we've actually been doing in some of the proposals and some of the high profile issues is we've tried to talk to both the companies, as well as the other sides. So we actually spoke with Elliott Advisors who were nominating the two directors to the Board.

And from our discussions and research, we found that the focus of Elliott Advisors, which is a hedge fund,

is actually, you know, much more short-term focused, which is really contrary to us, as long-term investors. When we talked to them, they indicated their holdings around two-year holding period. Our holdings are really like perpetual, because their long-term shareowners. So we didn't like the aspect of the short-term focus.

And furthermore, when we looked at the business review committee, which was formed after Elliott had the settlement with NRG, we discovered that of the three independent directors on that business review committee, two were going to be these directors being advanced by Elliott Advisors.

So for us to hear of, you know, that much influence for someone who's only holding nine percent, what about the other 90 percent to be able to influence that. So that's the way we looked at this. We looked at it long term shareowner versus someone who has a short-term focus and having that much influence on the business review committee, which we're not comfortable with.

COMMITTEE MEMBER YEE: Um-hmm. Have there been other instances where that's been a concern and we actually cast a vote, rather than withhold a vote? I mean, part of my concern is that we -- given our policies with respect to board attributes. I mean, we have someone

```
who has not only -- I mean has been just very public about
1
   being a climate denier, and here we are trying to, you
2
   know, really encourage, you know, board -- directors who
3
4
   really can address climate risk. And so I understand the
5
   other argument with respect to the short-term focus.
6
   I'm curious as to whether that argument has been also used
7
   to actually support a vote in the past in another
8
   situations, or to support a no vote.
```

INVESTMENT DIRECTOR NZIMA: In terms of the -this particular comment, this was specific to this
company. But when we look at our votes, really we're
always looking at each director what they bring to the
board. And, you know, we take each case on a case-by-case
situation.

COMMITTEE MEMBER YEE: Sure.

policy.

INVESTMENT DIRECTOR NZIMA: It's not something which we just go up out and apply, you know -
COMMITTEE MEMBER YEE: So it's not a sweeping

INVESTMENT DIRECTOR NZIMA: It's not a sweeping policy. We have to look at each situation --

COMMITTEE MEMBER YEE: Sure.

INVESTMENT DIRECTOR NZIMA: -- individually, and that's how we get to it.

COMMITTEE MEMBER YEE: And I know this one has

been difficult for a number of different funds. But this just -- it's just kind of like right in our face. This is someone who obviously isn't wedded to the science of climate change.

CHIEF INVESTMENT OFFICER ELIOPOULOS: If the Committee desires, I know Anne maybe can take a few minutes and describe -- there's a long history of no votes versus withhold votes in the area of voting for Board directors. And the withhold vote is essentially a no vote for the Board.

But I don't know, Anne, if you want to take a minute or two just to -- it's been a -- it's been a topic that has -- we've discussed at CalPERS probably for 20 years. Quite a history to it.

INVESTMENT DIRECTOR SIMPSON: Yeah. Anne Simpson. Thank you, Ted.

That's right. And obviously, unless we have majority voting, we can't vote no, or we can sit on our hands. And that's the best you can get. So being able to vote against the Board is actually quite new. And some examples that come to mind where we've really looked at the skill sets, and the competence include companies like JP Morgan, where you'll recall after the, what was called, the London Whale, but certainly some very serious losses on derivatives positions in the U.S. We analyzed the risk

committee and concluded that several members didn't have any background in financial matters, which they could bring to bear and give proper oversight.

It was the CEO, you know, delightful individual and an accomplished person, CEO of Honeywell, a woman who was a leader of the New York museums of the day, and an old colleague of the chairman chief executive at -- he was involved in the personal wealth business. And those three directors all did receive over 40 percent, or around 40 percent of support. It was a very high no vote and two of them stepped down. And I think it really put the focus on not just, as we say, with board quality independence, but competence and diversity, that these three elements together are important.

We, likewise, had similar discussions around Hewlett-Packard where after a series of acquisitions that went badly wrong or were written down very quickly, and the company lost billions, we, again, looked at the audit committee there to conclude that the people had not been able to demonstrate over a series of transactions that they had the oversight skills to really understand valuation, and ran campaigns there, and there were, again, significantly high votes.

We've also stepped in on other activist funds in situations at Apple with Carl Icahn and with Greenlight

Capital, and Trian Partners at DuPont. So I think that really when we do take a position of saying no to directors, it really is out of a very thoughtful consideration of what the company's strategy is. But when there's pressure, which might come from an outside activist, or pressure because there's a failure, which has cost us a lot of money, we've really then got to do very careful due diligence on the people on the Board and think about the skills and experience that they've got. So that is important always when we do do that, that we look at both sides.

Another example is Duke Energy where we voted against a director or several directors out of concern that there was an enormous environmental disaster with the Dan River coal ash spill. And there was nobody on the board with current and thorough understanding of the coal business. It was a company that had been formed through a merger of nuclear and coal, but the nuclear side seemed to have the majority of the seats afterwards.

So there were many circumstances in different sectors where this question of competence comes to the fore. And I think we're starting to understand on climate competence that there are many facets to that. It's an important concept, but we're having to unpack when we're looking at boards and the composition.

COMMITTEE MEMBER YEE: Thank you.

CHAIRPERSON JONES: Okay. Mr. Lind.

COMMITTEE MEMBER LIND: Thank you. First, I also wanted to congratulate the team on the victory at Occidental. I don't think we can overstate the importance of that. And the fact that it could lead -- you know, create a lot of momentum in the future. And we've seen in the past when there are Calpers victories in this area, the momentum that it's created for other institutional investors.

I had the opportunity last week to speak at a global conference around these issues. And, you know, I talked about Exxon, I talked about the hundred companies, and lot of the other work that we're doing. And, you know, clearly, CalPERS continues to be looked at as the leader globally on this sort of work. Although there is a lot of anxiety around the political situation here that could make it harder to do that work.

More specifically, and J.J. referenced this, the so-called Financial CHOICE Act that the Republican leadership is pushing around, Congress could really undermine our ability to do this work. And I was wondering if somebody could just kind of comment for a minute or two about the details of that and, you know, the dangers that it would create for our work here?

INVESTMENT DIRECTOR SIMPSON: Yes. Anne Simpson. Thank you very much for the question.

The issue of the shareowner proposal has been around for some years. We gave testimony to the House Financial Services Committee, Capital Markets Subcommittee last year. And I recall sitting alongside representatives from the Manhattan Institute, the Business Roundtable, and the Institute of Corporate Secretaries. And what was brought forth in this situation was that shareowner proposals, of which there are several hundred. There may be a much larger number filed, but most get settled amicably or discussed and negotiated. But the ones that go to the vote, the claim is that they are extremely expensive, and they essentially distract companies from doing the job they're meant to do, which is produce returns for shareholders.

Our argument in the oral part of the testimony was, first of all, that the costs such as they are, may be inflated by companies choosing to spend money in opposing, when, in fact, a shareowner proposal the costs -- to be fair, the necessary costs are to include those 500 words in the proxy and then to craft a response, which could be no -- yes, no, or maybe, and here's why.

So some of the numbers that are bandied around seem to us rather inflated. The second question is about

whether shareholder proposals bring value. And from what we can see, two things are important to notice, one is that this channel allows company owners to bring issues to the table without voting against Board members.

And it allows all shareholders, small, medium, large, domestic, international. There's a level playing field, which is welcome. That seems to us part of a vibrant corporate governance system that you should allow different voices to be heard.

And the issues that are being raised by small shareholders are quite varied, but they're all within SEC rules, which mean that you can't start, you know, overreaching and micromanaging. You can't produce anything that's irrelevant -- considered to be irrelevant or defamatory, so have to play within this quite narrow scope of issues which it's appropriate for the Board to consider. So there's guard rails in place, and that's good.

But what we've seen, you might recall Todd

Mattley presenting last year on some history here, which
shows that issues which were surfaced, raised through the
shareowner proposal process have now become mainstream.

You know, issues like staggered boards, or annual
elections, and proxy access. It's not just the big funds
like CalPERS which are using this channel for raising

important issues.

And I think there's another benefit to it for companies, which is when shareholders become concerned with issues like look at the examples Simiso gave on Wells Fargo, where we have indigenous people's rights, gender parity, sales practices in the retail side of the shop for Wells Fargo. These are issues which may not be currently if the line of sight for the Board, which are obviously important over the long term to the company's reputation, and to the company's economics. We know issues like diversity and recruitment are actually very important for performance not just for reputation.

So I think for companies to be open is beneficial. The proposal under the Financial CHOICE Act is to lift the current level of \$2,000 up to one percent. And what that would mean for major companies is that you would have to have a multi-billion dollar holding in order to file a proposal, which is precatory, in other words a fancy word for please, or it's advisory. It's not something which is binding the Board.

So I think if this passes the House floor, which it may, the question will then be when it goes to the Senate, will something like this actually survive the scrutiny of the Senate. And I think there's a question mark there.

I think the other consideration that may come forward is that if shareholders are not able to put a proposal forward, what will they do instead? Will they sit on their hands, will they stay quiet, or will the vote then go directly to the Board? And Board members will be held accountable, we may see votes against Board directors.

So I think we'd be losing an important channel, because when occasionally we do vote against boards -- and we do. We've just talked about some examples -- it's in very serious circumstances.

But I think the more troubling matter is that if this becomes a privilege for the multi-billion dollar holder, the U.S. Capital market really will have lost something by excluding the voices of retail shareholders. I think that's a great strength in this capital market, and something that even though Cal -- you know, CalPERS is in that multi-billion dollar club, we benefit from this wider diversity of voices being heard at annual meetings.

MANAGING INVESTMENT DIRECTOR BIENVENUE: So the only thing I would add, as you can tell we certainly have concerns around that component of the CHOICE Act. I will say that there are a number of -- I mean, there are numerous, numerous components to the current version of the CHOICE Act. And our key will just be to be very

thoughtful on places where -- where we are concerned and want to engage, to Anne's point.

We do think most of that will happen in the Senate. I'm actually going to be in D.C. next week to kind of have some of those conversations. But the key will be to be thoughtful about where we have concerns, why, and really go into the specifics to maintain or credibility in those topics.

COMMITTEE MEMBER LIND: Thanks, Dan.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Wylie Tollette, CalPERS staff. Just a last follow-up on that question. Next month, your federal representative actually will be dialing in. And we plan to ask them -- ask him to provide a fulsome update on sort of the status of the bill, and strategies that we can employee to affect Dan and Dan have indicated.

CHAIRPERSON JONES: Okay. Thank you.

Ms. Mathur.

COMMITTEE MEMBER MATHUR: Thank you. I'm struck that for the last 45 minutes we've talked about our deep conviction in voting rights and shareholder rights. And yet, we still maintain some investments in master limited partnerships and non-voting shares. And I guess -- I know you were doing some analysis and review of our holdings in that regard. And I'm wondering when that is going to come

back -- when a report will come back to this Committee.

And perhaps a policy change around that issue.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I was turning to Dan to see. We did look at our holdings, you know, what the level of our holdings are. It would be up to the Committee if that was a topic that the Committee wanted to be brought back for a policy revision. It's not on our current workplan.

COMMITTEE MEMBER MATHUR: Okay. Well, I would suggest that we really should consider reviewing that in a more fulsome fashion. I know there's a lot on the plate, but it does seem incongruous to me that we would continue to have holdings where we -- where we're not able to express our views as shareholders.

And so -- so, I guess, I would -- I'm looking around at the Committee, but I would suggest that we put that on the agenda in some way. Now, clearly we come back every year with governance -- global gov -- where we -- now, we call them Governance and Sustainability principles. Maybe that's -- maybe that's an appropriate time to do it, but I would just ask that we -- we do bring it back.

CHAIRPERSON JONES: Yeah, I heard your request.

And so when we look at our agenda for the next few months,
we'll see when this is something we may be able to bring

back and at what time, because we will be reviewing our agenda as, you know, we do every quarter with Ted and Wylie. And Bill and I look at the agenda and a lot of requests come in.

COMMITTEE MEMBER MATHUR: Sure.

2.4

CHAIRPERSON JONES: And so we just need to be sure that it's not bumping something off to get to this earlier.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think the two places to look to is both the review of the principles as well as our review of our five-year plan, which I'll -- which will both come towards the end of the year, beginning of next year.

COMMITTEE MEMBER MATHUR: And then I would just ask also just thinking about the five-year plan, economic inequality is on the five-year plan. I know there's the research work that's been going on now. When are we expecting that -- a report on that to come back to the Committee?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That's actually -- you're going to hear an update on SIRI in June I believe from Anne and Brad Barber.

That's currently on the calendar.

COMMITTEE MEMBER MATHUR: Okay. So that will be an update on the research, and then will that also include

a plan of how -- of engagement or follow-on steps around economic inequality?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Economic inequality was one of the research topics.

COMMITTEE MEMBER MATHUR: Right.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So

I -- I think we -- we have work to do with our academic colleagues to sort of figure out what the follow-ups might be at this point. I think this was primarily a focus on the -- what the research is telling us.

CHIEF INVESTMENT OFFICER ELIOPOULOS: And the strategic plan said to take in two steps, bring the research back and have a discussion, and then see if there's a plan that's warranted, given the research. So I think once we see the research, we can have a discussion about that.

COMMITTEE MEMBER MATHUR: Okay. Thank you.

CHAIRPERSON JONES: Mr. Costigan.

COMMITTEE MEMBER COSTIGAN: Thank you, Mr. Jones.

Just a few points. Ms. Simpson, great report.

Mr. Lind, I think, your question is spot on. I would certainly hope that we're conveying both to Congressional leadership and others our opposition to the one percent.

25 | I believe, for example, with Apple it would be \$7 million

at one percent. Company -- is it one -- turn on your microphone.

I thought the company was valued at -- Apple is valued at 700 billion so it would be 7 billion?

INVESTMENT DIRECTOR SIMPSON: Correct

COMMITTEE MEMBER COSTIGAN: Okay. All right, because, I mean -- so first of all, I'd make the argument, any publicly traded company that opposes that ought to just go private. You know, that -- they're seeking to cut folks' voices off. And so I would certainly hope that we convey it from our standpoint.

I think you were spot on. All it ends up doing is empowering large investors like ours, which would probably be fine, and large shareholders, and not small voices. Because I think I own one-one thousandths of Apple. And I think I know understand how to read their statements, and my have something to say in the future.

One thing I am concerned about, and I've raised before, it's still back private equity, we had a public statement earlier today about someone we should talk to. In looking at their six board members, they have one woman on it.

I still want a policy is how do we -- as Ms.

Mathur raised on the LPs, we spend lots of time talking on the public equity side. We still need to look at the

private equity side. So again, that's just a concern I have when -- and particularly, if you even look at the organization that was referenced, that board member has been there five years. It doesn't look like there's a lot of change there.

I think there's still some significant concerns. So we need to be having a unified message. Just because we can't vote against you, doesn't mean we're not going to look at you.

And so while we're out there taking on -- and I agree with Mr. Lind, the issues of Wells Fargo and other are all very good to hold them accountable. We need to -- you know, half the portfolio is in the other space as well, so we can't be talking about just one element. But I would certainly hope with K&L Gates, as part of their presentation next month, what have they done prior to that. And I would certainly hope someone is talking to Mr. McCarthy prior to the meeting next month.

Thank you, Mr. Jones.

CHAIRPERSON JONES: You're welcome.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah. I just want to follow up on Priya's point. I would encourage us to look not just a master limited partnerships, but any security that reports to the ownership but doesn't have votes, or

has unequal voting. So I think all of that should be part of that discussion.

Thank you.

CHAIRPERSON JONES: Okay. Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yeah. Thank you. One more time.

I -- Priya brought up something that sort of reminded me. When we were talking about income inequality, I think last month, Ted, I had mentioned what we could do around immigration. And I was wondering I kind of remember reading - and maybe, Anne, you can help with this - in the Pension Beliefs, that -- that we have something stating that we need to protect immigrants, one of our Pension Beliefs, or am I wrong? Am I...

INVESTMENT DIRECTOR SIMPSON: Would you like me to answer?

Yes. In the Governance and Sustainability
Principles --

COMMITTEE MEMBER TAYLOR: That's it.

INVESTMENT DIRECTOR SIMPSON: -- we are -Calpers supports the global compact. And the language in
the global compact -- UN global compact focuses on human
rights for workers, and highlights the importance of
making sure that companies respect the human rights of
vulnerable groups. And one of the vulnerable groups

that's listed is migrant workers. So our principles do specifically cover that. And I think it is consistent with our Investment Belief number 4, where we talk about the importance of managing not just financial capital and physical capital, but also human capital.

And, obviously, you know, regardless of the sector the companies are in, or the geography they're in, how companies manage their people is very important for value and for -- and for risk.

next month, is there any way we -- you could get that to us, the UN Global Principles that we could take a look at. But also take a look at whether or not -- I don't know if it would require some research, what the impact -- economic impact is when we're talking about massive deportation of our migrant workers here in California, along with the fact that we -- you know, our human capital needs to be taken a look at, in terms of how we're treating it.

CHIEF INVESTMENT OFFICER ELIOPOULOS: We could certainly forward, if the Committee would like, a link -- you know, a link or a copy of the compact.

COMMITTEE MEMBER TAYLOR: That would be great.

CHAIRPERSON JONES: This is why I said earlier,

we needed to meet with staff, because a number of requests

come, and so we just need to have a system to prioritize it, so that it -- we've been -- they've been responsive, but yet, still we need to be mindful of what we're asking staff to do, so --

COMMITTEE MEMBER TAYLOR: Sure. Great.

CHAIRPERSON JONES: Okay. That's that item.

Thank you very much.

And now we will move --

COMMITTEE MEMBER HOLLINGER: Do you have public comment?

CHAIRPERSON JONES: Yeah, we do. Ms. Kirsten Spading and Michael Ring, if you can come down. And the clock will start when you start talking. I'm sure both of you are aware of our three-minute limitation, because you've been here many times.

MR. Spading: Thank you very much. I'm delighted to be with you. And I really rise just to speak to the wonderful work of the staff and the Board on two items that were raised in this agenda.

First, on the Oxy vote. I'm with Ceres and Ceres Investor Network. And we count this as a major win. You're absolutely right that this is work that's been ongoing for many years, but I wanted to highlight just a couple reasons why we think it's really significant for all investors across the globe.

This proposal asked Oxy to assess and disclose exposure to climate risks and global low carbon trends. So it is asking the company to acknowledge their own business in the context of a changing global economy that is moving towards a lower carbon future.

The resolution asked them to oversee scenario analysis, and specifically to look to scenario analysis that would limit climate change to under two degrees Celsius. That kind of analysis is just the kind of analysis that is required by the TCFD recommendations. So the positive win here not only will change the emissions globally, it's going to impact the entire sector, and it moves us in the right direction towards implementing the draft recommendations from the TCFD.

The second reason why this is so important to us is that CalPERS was joined by BlackRock in the vote. And this is the first time that such a large global asset manager has voted against the recommendation of the management in favor of a climate disclosure proposal. So we think that this is really a sea change. It signals a very different atmosphere, a very different climate for these kinds of resolutions going forward.

And third, this resolution challenges a new report by the IHS market, that came out of the oil and gas industry really challenging the TCFD recommendations. And

so what we've got now is a direct confrontation with really some bad policy moves by the oil and gas industry. And we think that this is going to push back and really change the way that the industry responds.

So we think it's very good for your portfolio, but it really has impact for all of the investors across the globe. And we commend staff and your work on that particular vote.

The second thing that I wanted to raise was your work on the global climate 100, engaging the systemically important carbon emitters. Ceres is working closely with CalPERS, your staff, on how it is we implement this initiative. We're working on the design of the alliance. We're working on the engagement agenda, and we're really focused on the methodology for developing the final list of which companies we're going to focus on.

You are leading that work --

CHAIRPERSON JONES: Turn it back on. Let her -- MS. Spading: Thank you. I will be brief.

You're leading that work, and it's very important to all of us. I think it's important, because again these engagements will impact the emissions. So you're going to have a profound impact on climate directly, but it's also going to create disclosure and coordinate investors around the importance of the TCFD recommendations.

So this work really changes the way that we're going to get disclosure from these high emitters, and will improve our implementation of the SASB framework, which is also something that you're -- you're working on, but really understanding how we engage around these key performance indicators and supporting that framework as we go forward. So we're thrilled and thank you very much for your leadership.

CHAIRPERSON JONES: Okay. Thank you very much. Mr. Ring.

MR. RING: Good morning, Mr. Chair and Committee. Michael Ring, SEIU. This is my annual spring visit to the Board, where I thank this organization on behalf of our leaders and its members for the incredible leadership you show in this area of corporate governance and sustainability. Our members and leaders so much appreciate CalPERS' ability to put these very challenging systemic ideas into action, to both manage the systemic risk you all face in managing 300 billion plus dollars that we hope keeps continuing to grow, and grow, and grow, and also to look for opportunities as was mentioned.

So, in particular, I also want to thank the staff. I know you've had a lot of transitions in staff. And quite honestly, we work with your staff on these issues, and they haven't missed a beat. So I really am

impressed with the work as folks are going through an organizational transition. And our members and leaders much appreciate it, as it helps protect their benefits.

Secondly, I just wanted to take a moment to thank the staff and the Board for hosting the diversity forum last week. I think it was an outstanding event, and I know there was a great deal of care and work put into the event. And some of your staff members who usually have to put up with me a lot, really were grinding away to make sure that event was really put together in an effective and thoughtful fashion. And again, on behalf of our membership, I wanted to thank all of you, and the staff, particularly, who did all the work.

And finally on a less serious note, Mr. Jones, you and I can lament the state of the NBA Playoffs, the Clippers are out, the Nicks didn't make it, so it's a tough year again, sir.

So thank you all.

(Laughter.)

CHAIRPERSON JONES: I don't know if I should thank you for your comments.

(Laughter.)

CHAIRPERSON JONES: Okay. Thank you anyway.

We move on now to Item number 7, Investment

25 | Office Cost Effectiveness.

1 (Thereupon an overhead presentation was presented as follows.)

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Great. Thank you, Mr. Jones, and thank you, Investment Committee. Wylie Tollette, CalPERS team member.

I'm pleased to be able to spend a few minutes presenting the Investment Office's annual cost effectiveness report.

There's a lot of data in this report, and I'm planning to cover several of the included slides proactively. I'm also happy to take questions on any of the information following that.

Before we get into this, I'd like to take a moment just to thank Heather Cable and Matt Flynn from my team who helped pull this information together. Heather would be here presenting with me, but I'll congratulate her on her wedding on Saturday. So she's actually on her honeymoon, otherwise she'd be here with me.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
Okay. It works. Great.

As you know, our 2020 Vision strategic plan is focused on reducing costs, risk, and complexity in our portfolio and our operations. The Investment Committee

has been hearing about this since late in 2014. And this presentation is quite clearly focused on our efforts to reduce costs.

Investment Belief 8 says that costs matter and need to be effectively managed. I'm going to cover three key points, a bit of a preview for what you're going to see in this deck.

The first, I think you'll see in this report that we've been broadly successful in reducing costs, where our portfolio costs significantly less to manage today than in 2010, yet the portfolio is more than one-third larger.

Additionally, you'll see that private equity remains the most expensive asset class. It's also the best performing asset class, despite this high fee burden. As we discussed at the November 2015 workshop, CalPERS has chosen to continue to invest in private equity despite the fee burden and transparency challenges inherent in the asset class.

We've made significant progress untangling and reporting fees, expenses, and profit sharing in private equity over the last few years. We've basically been paving the highway at the same time we're driving on it. You'll note in the CEM material, however, that both we and the industry have more work to do.

And the Investment Committee retains the

authority to continue investment in private equity, despite the many challenges, or cease that investment.

So with that, I'm going to dig in here

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Slide 4, there's an awful lot of information on this, so I'm going to spend a few minutes on slide 4, and see if I can pick out some highlights. Starting at the top of the slide, you'll first notice that we've reorganized these tables from prior years, where all the management fees, the base fees and expenses are at the top of the slide, and all the profit sharing is below.

You'll notice that external management fees are down 404 million from 2010. Again, that's while the portfolio grows and base fees are usually calculated as a percentage of assets. So it's quite -- that's quite an impressive performance.

Total management fees are also down 250 million from just the prior year. Now, this is due to both actual fee reductions in our private asset classes, as well as the effect of a large number of offsets of prior year fees that hit in the current fiscal year.

In addition, we've made refinements in the accounting for private equity in the PEARS system that allow us to better segregate actual fees CalPERS pays from

general partnership expenses the overall fund, and all partners pay.

We do disclose partnership expense in footnote one below. In previous years, these figures, fees, and partnership expenses were tangled together, as we used the K-1 tax documents as our source documents for this information.

Importantly, we don't disclose partnership-related information or any of our other partnership investments in real estate, infrastructure, other types of partnerships that we participate in. We wanted to disclose them here again because of the focus on private equity expenses.

Now we believe this treatment of partnership expenses is appropriate and maintains the proper distinction between -- and consistency in the treatment of those expenses between our various asset classes, as well as in the degree of influence that CalPERS can wield regarding our negotiating ability, as well as who bears those costs, and who has con -- privy of contract.

If we were to re-commingle the \$75 million in partnership expenses back into external management fees, that number, that \$500 million number, up there in the current fiscal year, that would jump obviously to 575.

Now, if we were to re-commingle the underlying

fees on fund of funds, that number would jump to 621. As I mentioned in prior years, all those numbers were tangled together, because we were using the K-1s. If we did that, if we re-commingled them into that number, we'd be at 621. Note that that's still a decrease from the prior year of 129 million.

When we get to the CEM peer data in a few slides, you'll see that either way, whether we re-commingled them or left them where they are, segregated out, CalPERS would still be a low-cost leader.

Moving to the next section on the slide, we've continued to insource investment management. And that's been a very economical activity with total internal costs climbing from 136 million in 2010 to 138 million over the time period presented. And that's a very significant growth in the percentage of our assets that we actually manage here in Sacramento.

Finally, you'll note at the bottom, we reorganized all the profit sharing into that section. And we now include the carry paid in private equity for the first time.

I would note one typo on the page. You'll see a footnote 3 that's several rows up next to portfolio management services next to the number 28. That number should -- that little footnote should actually be next to

the number 632 several rows down in the same column. That number represents the large catch-up in incentive fees paid on real estate. That happened that year because of a change in our accounting practice.

We believe that properly structured and negotiated profit sharing arrangement help to align interests and need to be considered as fundamentally different than base fees. For example, we would not necessarily want to minimize profit sharing paid, though, of course, we'd like to keep as much of it for ourselves as we can negotiate.

As recently highlighted by David Swensen at Yale, we should be willing to pay for performance where we have evidence it exists. This goes to why the strategic initiative is called cost effectiveness, and not cost minimization.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

This line chart reflects similar information as the previous table, though reflected as basis points over the total fund assets. With the inclusion of the fiscal year 2015 private equity carry information included -- included in the CAFR, you'll note we are now including that data point on the slide. It's the little triangle with the 49 next to it.

And we'll begin accumulating that trend now that we have that carry information available and can split it out -- and segregate it, and we'll continue to disclose that in that trend going forward.

I think the key point on this slide that I'd like to highlight is that all the trend lines actually are moving in a positive direction with total fees and profit sharing coming down from the prior year, and internal expense remaining quite stable.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I'm going to jump forward to slide 7 here.

Slide 6 presents total expenses and profit sharing, right there, while slide 7 illustrates total external fees and profit sharing by asset class. And you'll note that similar to prior years, private equity makes up the bulk of the external fees and the profit sharing that we actually pay.

You'll also note that private equity has the highest ten-year return of any of asset classes despite the high fees. And it's important to note that this net return includes the impact of all fees charged, including fees charged to portfolio companies, because that affects the net return that we receive. That includes fees paid by Calpers, and any carried interest.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Turning to slide 9 nine, we're going to cover some of the CEM information. CEM stands for cost effectiveness management. It's a benchmarking organization headquartered in Toronto. You heard from some representatives from CEM last year, and we're planning to have CEM come back next year as well.

You'll note that our cost advantage here actually increased over the prior year by about 7.8 basis points. This is due to, as you'll see - and these comments are included in CEM's included report - that it's largely due to the high percentage of internally managed passively-oriented assets within our plan. Those are quite -- we manage those very economically, as well as low er overall fees for our private assets where the bulk of the actual expense still remains.

Now, it's quite important here, relative to this slide, to note that CEM's methodology for calculating the peer benchmark costs for both real assets and private equity uses a fairly simple estimator of gross fees times the net asset value to calculate our peer cost information, whereas Calpers information is using the actual expense data that we reported in the CAFR.

Now this means that the cost advantage

highlighted here may be larger than it otherwise would be, if CEM's methodology captured more detail from our peers. You may recall there was questioning of the folks from CEM when they were here last year on this exact point.

CEM is working to implement the same ILPA template data gathering process for our peers that CalPERS uses to support the PEARS system. And they estimate this is going to take several additional years. And that's actually noted in page 12 of CEM's included report. And as I mentioned, we plan to have CEM attend next year to provide an update on that exact topic.

We've had this cost effectiveness focus as part of CalPERS overall roadmap since 2010, and it's fair to say that from, I think, the Investment Office's perspective, much of what we might call the low-hanging fruit has been picked.

In order to continue to make significant progress, we're going to have to look at how we invest in the private markets and in private equity in particular. Now, we're planning to begin discussing some of the different options around this at a high level with the Investment Committee at the off-site in July.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: Finally, on slide 10, I'd highlight for the first

time in my four years presenting this information to the Committee, CalPERS has made it into what we call the golden quadrant up there in the upper left, compared to our global peers, where our cost advantage puts us to the left of the vertical Y axis, and our positive net returns for the five-year period put us above the horizontal access.

We've had the cost advantage for a number of years, so we've been left of the Y. In fact, we're quite significantly left of the Y. As I mentioned even if you included those partnership expenses and the fund-of-fund fees -- underlying fund-of-fund fees, where we don't have privity of contract with those underlying funds. Even if you included those, we'd still be -- we'd still have a great advantage on the cost front. But for the first time, because we have positive five year net value-add, we're now above the X axis. It's quite a -- I'm very proud of the fact that we've been able to achieve that. And it represents a long come back from a difficult performance environment in the mid-2000s.

On the right what you see is our performance and value-add compared to the U.S. peer group. And you'll note we've moved -- we actually moved further up into the quadrant when compared versus the U.S. peer group. We've also included a little estimation of where we think we

would be if we just had a one-year measurement using the one little triangle there, the sort of outlined triangle there.

So those are the slides that I'd planned to proactively cover. I'm quite confident there's good questions coming from the Committee, so I'll pause now, and I'll look forward to taking those.

CHAIRPERSON JONES: Okay. Thank you.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah. Surprise, surprise. On slide 4, I'm not going to ask for the -- the break-out this year, but going forward when you look at the external management fees for private assets, I think it would be helpful to break out real estate and private equity and whatever else we have in there.

I continue to disagree with reporting this net of offsets. Whether you take it out of my rocket or my left pocket, I'm still paying for it. And that's a point that's CEM has made numerous times.

The -- one of the things that is not here is fee waivers. How are they counted or not counted in this cost chart?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

They are, in fact, netted from the number, if they're done --

COMMITTEE MEMBER JELINCIC: Okay.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

-- similar to the way that an offset would be treated. I would highlight again that just on that note that the net returns that are communicated here do actually include every deduction that occurs within a private equity structure, so that is the true net number.

COMMITTEE MEMBER JELINCIC: Okay. And then on slide 6, I just want to point out, because it's so glaring, that those external management fees are based on \$39 billion, the internal management tease are based on 208 billion. It tends to be supportive of my argument bring the suckers in-house.

And I -- oh, there it is. On -- and then on slide nine, second from the bottom bullet, profit sharing is included in the public market asset classes and hedge funds. Why -- why do we treat it different than private assets?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That's a quirk of CEM's data collection methodology. They're working actively to improve their infrastructure and methodology around collecting profit sharing in the private assets. They have a quite an active project to do that today. As I mentioned, they're using the same ILPA template that we're using, the same

basic format and data to do that.

It's not there today, so that's essentially why they have it that -- structured that way.

COMMITTEE MEMBER JELINCIC: Okay. And CEM pointed out that the compari -- they're not comparing apples and oranges. They're really is a difference, so I'm not sure how much of the prior -- you know, how much we pat ourselves on the back, if we don't really know what the numbers are.

But in the -- one of the things they had in their report is that apparently we are paying -- and you knew this question was coming, because I'd warned you. We're paying more for external active management. So on slide 15, 103 of the iPad, than our peers. Now we're using less of it, but we are paying more for it. And so I was kind of curious, that doesn't go with what we've been saying for a long time. What's going on there?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yeah, that's a -- that's actually a really good question. And we were able to dig into some of the details as to why that's happening.

Many of our peers in their external -- externally managed costs, so the peers, have both active strategies, as well as large passive component. And that passive component tends to be much less expensive, and it drives

down their average -- their average fee load for external management.

CalPERS, on the other hand, we manage almost all of our passive strategies internally, so that externally it's almost all active. As a result, sort of the average fee burden there actually does increase.

So that's one factor. The other factor is in the year in question for 2015, we still had a significant component of our hedge fund program active. And the fees -- many of the fees in the hedge fund program are actually paid sort of following the fiscal year-end. So we had the double whammy of having to pay fees for the year that had ended, but the assets had already dropped, because we were in the process of winding that program down in 2015.

All of that flowed through the CEM survey this year. So that's why you see ex -- our external management costs pop up in the year that you examined.

COMMITTEE MEMBER JELINCIC: But that was also true last year.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yeah, it was true last year, but it wasn't as true. It wasn't as dramatic as it was in the year in question.

COMMITTEE MEMBER JELINCIC: Okay. And I'll just

point to the heading on the top which shows kind of that it's not an apples to oranges.

Last year, we were given the entire report, not just the summary. And as we've learned numerous times, the devil is in the details. So I would like to request that I get a copy of the whole report. The rest of the Committee is more than welcome to it if they want, but I'd like the Chair to direct that I get a copy of the whole report.

CHAIRPERSON JONES: Sure. That's direction. CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Okay. Yeah, we were happy to provide the whole report. We received some requests last year that it was another pound of paper in the books.

CHAIRPERSON JONES: Well, let me restate the question, how many Committee members want the whole report?

COMMITTEE MEMBER JELINCIC: Send it electronically, and then it's not a pound of paper.

CHAIRPERSON JONES: Okay. Provide it to the entire Committee.

Okay.

2.4

COMMITTEE MEMBER JELINCIC: I assume -CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
Will do. It's not a problem. It's just I didn't

want to -- last year, as I said, we had some committee members just felt burdened by the degree of paper. It's quite a thick journal of information.

COMMITTEE MEMBER JELINCIC: And I assume we have it electronically.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: We do.

COMMITTEE MEMBER JELINCIC: Okay. Thank you.

CHAIRPERSON JONES: Okay. Mr. Bilbrey.

COMMITTEE MEMBER BILBREY: Thank you, Mr. Chair.

So it would be safe to say that CEM is considered a standardized instrument?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I'm sorry, Mr. Bilbrey, I couldn't hear your question.

COMMITTEE MEMBER BILBREY: Is it safe to say that CEM is a standardized instrument that is being used?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yes, that's right. The CEM survey format asks the same set of questions of all of the participating plans, and collects that information.

COMMITTEE MEMBER BILBREY: So what kind of data auditing does CEM conduct and before it gives its results out?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: We can ask them that question when they're here next -- last

year, but they do a validation process. They basically compare all of the results they receive to the prior year. They follow up with us if they notice large fluctuations. They look at how the information compares to the CAFR -- the reported CAFR.

In addition, this past year, actually we requested our own internal audit office come and examine our process for gathering and supplying this information to CEM within CalPERS. And they reviewed that and came back with no particular findings, and so in order to gain our own internal comfort that our process and our plumbing there was sound.

COMMITTEE MEMBER BILBREY: Okay. And other than savings, is there anything else you learned from this?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Other than cost savings?

COMMITTEE MEMBER BILBREY: (Nods head.)

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yes, definitely. I think the -- the move to manage assets internally continues to really be a very economical equation for CalPERS.

And so we continually look at what components of the portfolio could we decide to continue to insource, because that -- if the overwhelming picture that emerges from examining the CEM data is if we can do it ourselves

and do a professional and effective job of it delivering performance, that we can do that in a very cost effective way.

I think we've proven we can do that in many of asset classes. So now it's really a matter of looking at some of the private asset classes is really where the rest of the opportunity there lies. And so, as I mentioned, we're examining options to undertake in that area.

COMMITTEE MEMBER BILBREY: Well, we look forward to the outcome of that possibly being in-house.

Thank you.

CHAIRPERSON JONES: Okay. Thank you.

Seeing no furth -- additional questions on that one, we will -- you completed your presentation, Mr. Tollette?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I did. Than you, Mr. Jones, and thank you, Committee.

CHAIRPERSON JONES: So we do have a couple of requests to speak on this item.

Ms. Margaret Brown and Mr. Michael Flaherman.

If you'll come on down and each of you will have three minutes to make your comments. And you will note that the clock before me will start as you begin speaking. And that will help you judge your timing on your comments. And please identify yourself and the organization.

MS. BROWN: Thank you. My name is Margaret Brown and I'm a candidate for the CalPERS Board. I'm also a manager of a school district where I administer large scale capital projects involving the expenditures of millions of dollars.

I'm here today because the CalPERS investment cost on this presentation 7a appear to be underestimated by \$75 million. I believe the staff did address my points that I'm going to make today, but let me go ahead and make them for the record. The table on page 4 shows CalPERS largest single cost as external management fees based private.

In 2015, costs in this category totaled \$750 million. But in the most recent shown slide, the cost declined by 250 million to 500 million. And this 500 million was included as a component in the grand total cost shown at the bottom of the table, which was nearly 1.5 billion.

The problem arises because the label for external management fees based private contains a footnote suggesting that the number no longer includes private equity partnership expenses of 75 million. And it appears that the 75 million has been subtracted from the total starting this year.

The total also shown for prior years match what

was shown in the prior presentation. So it's pretty clear to me that it wasn't excluded before. So given the data available to me, I must conclude that the expense was not excluded prior to this most recent report.

And that brings to mind two important questions about the exclusion of the 75 million.

First, why were these costs excluded?

Second, given that the footnote acknowledges the dollar amount of the excluded expense, why was it excluded at all from the grand total of investment expense?

Is this change being done in order to obscure the fact that it is not included in the total? You know, in trying to understand why staff excluded the 75 million, I learned that a number of CalPERS employees receive annual bonuses that are based in part on achieving expense control targets. I wonder are these the same people who are deciding to not count certain expenses?

Does this boost their bonuses?

Oh, I don't have enough time to cover the rest of the items that were in my letter -- or an email I sent to you, but I do want to say that as a financial manager, I live by the principle of following the numbers where they lead, and I sincerely hope that board looks into those discrepancies contained in my email.

Thank you.

CHAIRPERSON JONES: Okay. Thank you for your comments.

Mr. Flaherman.

MR. FLAHERMAN: Again, my name is Michael Flaherman. I'll just jump a little bit on what the previous speaker said. I worked at a private equity firm. I sent out capital calls for billions of dollars, and I'd like to just explain. The fund expenses are listed as a separate item in capital calls, and you write checks for those numbers -- for those amounts. So they are separate amounts.

It's puzzling to hear an argument that having a better IT system now means that you're no longer going to include them when you think that it would mean the opposite.

I'd also like to just point out that while this is a better presentation than it was in the past, because it include -- it includes carried interest, or what your staff calls profit sharing, which is kind of a funny word. It's kind of like a propaganda word, right, profit sharing.

You know, if you Google that, you're not going to find news articles about profit sharing, right? It's all going to be about carried interest. And the only people I've ever heard use profit sharing are a few public

pension funds.

So you've included that now. That's a step forward, but you're still not including significant parts of your cost, right? You're not including what Mr.

Jelincic referred to as pocket A and pocket B, right? The pocket B is the money that's coming out of the portfolio companies as compensation to the private equity managers that you hire.

And there's been some discussion about the fact that you can at least begin to get part of that cost, if you would measure your management fee cost in terms of the gross contractual obligation, because with gross contractual obligation is what you pay if they don't take the money from the portfolio company. So if properly understood, your cost in that regard is really hundreds of millions of dollars higher than this.

And then finally, I really didn't understand Mr. Tollette's answer to Mr. Jelincic about management fee waivers. That's a cost too. Sometimes private equity managers say don't pay part of the management fee, but instead pay my capital contribution to buy companies for the fund.

They do that for tax reasons. And you write checks for that. Money literally comes out of your bank account labeled management fee waiver contribution. And

that's probably well more than \$100 million a year, and that's just -- that's just an off-the-books expense.

And if you -- you know, you've built this sophisticated PEARS system, and if it can't track what you're paying in management fee contributions, that's, I think, a significant problem. Probably it can track it, and I think you need to include it as an expense.

I think economic -- you know, we could debate accounting issues all day long, but I don't think anybody intends this as a -- as some kind of GASB-compliant presentation. It's an economic presentation, and it should reflect that economic cost.

Thank you.

2.4

CHAIRPERSON JONES: Okay. Thank you very much.

Just one point that you raise the question about Mr. Tollette's statement in response to Mr. Jelincic. You can meet with him and he'll be able to explain that to you. Okay.

MR. FLAHERMAN: I'm happy to do that.

20 CHAIRPERSON JONES: Okay. That concludes that 21 item.

We go now to the next item, the Investment Office Roadmap and Target Operating Model update.

(Thereupon an overhead presentation was presented as follows.)

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you, Mr. Chair. Wylie Tollette, CalPERS team member.

And looking up here I'm pleased to present the Committee with an update on our strategic planning efforts.

We're going to cover a recap of our five-year strategic plan, the 2020 Vision. You've heard many of these elements before, so I'll keep that part quick.

We're going to talk about the INVO governance process that we've -- the enhancements to that that we've made over the last year, and we'll include a few highlights of some of our recent accomplishments. And last, but not least, we'll be covering the Target Operating Model, which we all know and love is our tool for managing operational risk in the Investment Office.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So here's that same slide again. We're so proud of it. We like to hit it in multiple decks. So this really helps articulate our mission and vision. And again, the idea is to focus on risk, cost, and complexity. We can't choose the performance that we earn, but we can choose the risks. We can choose the costs, to a large degree, and we can choose the level of complexity that we employ.

And the way we think about that is to look at our portfolio, and to focus on strategies that we believe are repeatable, predictable, and scalable. I think we first introduced some of that language back in 2014. And here we are three years later still sticking to that, and we've made great progress.

2.4

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: We have five strategic objectives outlined here. And you can see how they -- this slide attempts to communicate really how they align with the CalPERS strategic plan. You can see they're very well aligned. Business effectiveness and investment platform and controls tie very directly to the reduced cost and complexity goal within the CalPERS strategic plan.

Enhanced capital allocation ties to fund sustainability. Investment risk management and performance attribution ties directly to the risk management goal, as does ESG risk integration. We think risks are just financial. They're also environmental, social, and corporate governance risks that we need to think about.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
This slide really helps illustrate. We came up

with this actually back in early 2015 at the off-site.

And actually Ted and I have been sort of patting ourselves on the back, frankly, because it's been tracking remarkably closely to what we've actually been able to accomplish.

So we were -- we must have sort of had some type of crystal ball available to us back in 2015 in terms of what we wanted to achieve as we restructured the office and the portfolio, and where we are.

And as you can see this year, we really focused on formalizing our trust level investment decision making, improving our risk and attribution review, and reviewing benchmarks. And as you know, we've engaged the Committee in many of these elements, including just a few agenda items ago, the review of benchmark.

When it comes to -- you can see where we plan to progress for next year. So we going to continue -- we're going to continue to look at trust level capital allocation. And that has to do with our segments activity and the new ALM.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

This slide communicates the high level governance committees that we've put in place that support our Investment Strategy Group. The Investment Strategy Group

is our internal investment decision-making body that's composed of all the senior members of the Investment Office. I'm an ex-officio member. I don't have a vote, because as the owner of the risk and performance function, it would be inappropriate for me to both vote on investment strategies and then measure them. So my team is like the referee for that. Anne Simpson is also an ex-officio member who participates in the Committee.

We've formed four subcommittees to our ISG, trust level risk and attribution, portfolio allocation, governance and sustainability, and the trust level investment review. And their mission is outlined there.

And in the appendix to this deck, we've also included the membership of all of those committees. And you can see we've really tried to get a good cross-section of the office, as well as to incorporate diversity, the diversity of our investment professionals on those committees. That's something that's ongoing, and we're really quite pleased with the progress that these committees have mad in terms of integrating a total fund level view within our investment decision making.

The goal is to try to get asset classes to sort of interact with folks outside their day-to-day teams, and really get folks thinking about how would you make decisions if you were in Ted's shoes, or my shoes, or

Eric's shoes looking at this from the total fund perspective. And I think it's been a really healthy progression we've made. Still work to do, but a really positive step.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Here are some of the key project updates from this past year. The first one I'll highlight there is targeting July 1st 2017, an implementation of the global investment performance standards. These are standards promulgated by the CFA institute that really help ensure that our performance reporting is in line with standards and presents a fair picture of our overall performance.

We're very confident we can hit that date, and we're hopeful that it also drives some improvements in consistency of reporting across the whole public pension plan space.

We've made good progress implementing our internal short-term investment fund. We were growing, as you've seen we've had a fair amount of cash on hand with a four percent target cash allocation. That's increased the amount of cash we've had. And we wanted to make sure that we had another avenue for that cash to invest in, where we controlled the risk levels and really understood the portfolio very deeply. So we've worked with Curtis Ishii

and our global fixed income team to build out an internal STIF. We also anticipate that going live this summer.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: In addition to the Governance and Sustainability Committee, it's a to the subcommittee. That subcommittee has now built out several working groups that report up to it, one focused proxy voting, one focused on financial markets reform and regulation, and one focused on SIRI, the research activity that you're going to be hearing about next month.

And so that again is a way to integrate ESG considerations even further down into our organization. I we're very pleased with that activity. It's still early days for those working groups, but I think they're progressing well. And you heard back in August, you saw for the first time our total fund attribution framework. You'll be hearing about that again this coming up August, and we're quite pleased with this attribution framework as a way to try to translate the and hold accountable different components of the office, and the decision making that's taking place and really have it translate right back into what is the impact on the total fund return.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Here is our Target Operating Model. It's a slide, you know, I think the Committee has seen many times. And from what I understand, you know, prior to my tenure here, my three and a half years here, many of these boxes were red. I think when I joined, I think we had about 10 red high-risk areas of the plumbing within the Investment Office. We're now down to four, or about eight percent, and about 43 percent are in yellow or moderate risk, and the others are essentially green or lower risk.

A couple of the changes are highlighted on the slides. You can see, for example, business continuity and disaster recover within the Investment Office, we've dropped from red to yellow. And that's due to several successful tests of our systems out in the Rancho Cordova emergency operations center.

So we now feel that we can drop that from high risk to moderate. I don't know that we'll ever drop that to green, because I think the costs to get it to green may be more than we would be willing to incur. So there's probably always some risk that we may need to incur from a disaster recovery standpoint.

But we know feel like we can be confident in recovering all of the essential functions reasonably quickly, and have them up and running.

The other one that I'll height light there is -that's actually increased is on the affiliate and DC
product management. And that's actually quite a specific,
and we hope relatively short-term, phenomena, where you
might recall in December we extended the tobacco
divestment mandate to the affiliate programs. And that's
proving to be a fairly complex undertaking. We contract
with SSGA to manage many of the underlying products -index products in the affiliate funds.

And they don't have a CalPERS specific index product that excludes tobacco in the way we want.

Actually, they don't have really any tobacco-related indices. And so we're having to work with our external providers to build that out. And it's proving a little bit more costly and complex than we first anticipated. So that increase in risk is designed to reflect that.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: We have -- we plan to contract with Cutter & Associates who we've used in the past. They're expert consultants and really do an industry survey of the current state of investment infrastructure. We haven't had them in the shop for a couple of years, so we're planning to have them come in and do a quick refresh of their industry -- of our activities versus sort of an industry benchmark for those

different functions included on the TOM.

We're hoping to simplify it a bit too, so there might not be quite as many functions the next time in line with our goal of really trying to reduce complexity. And we'll bring that information back -- we plan to bring that information back to the Committee in December.

--000--

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Finally, next steps. We're building out our 2017-2018 roadmap. It will be very focused on the asset -- implementing the outcome of our asset liability management cycle. As I mentioned earlier, we've convened project teams to work on, for example, integrating private -- the private equity portfolio into our consideration of our total growth asset class, and project teams to look at our real estate infrastructure.

Potentially, we might consider using the PEARS infrastructure, what we have for private equity, we're considering implementing that on the real assets side, so that we would have one infrastructure for the bulk of the private assets, which I think we would -- that might allow us to look at our portfolio in a more wholistic way.

Those are just some of the currently 36 different roadmap initiatives. And if I know Ted, he's going to push us to try to get to a round number.

(Laughter.)

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So we'll see if we can get it down to 30. We have for the last several years we've managed to prioritize. So that will be coming up, and the Committee should expect to hear about that in December.

So that's all I was planning to cover. I'm happy to take questions, Mr. Chairman.

CHAIRPERSON JONES: Okay. Well, thank you very much. And you're absolutely correct, right before you arrived there was a lot of red on this chart. And so it's -- we appreciate the work that has gone into it to reduce the risk to the organization.

And I think it's also heartening, as you mentioned that in terms of disaster recovery that it may never get to green, but there's others that may go back in terms of your continued diligence of reviewing and evaluating these functions going forward. So I'm glad to know that this is an ongoing process. It's not just a snapshot, one point in time.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: That's right.

CHAIRPERSON JONES: So with that, Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: A couple of things.

25 On slide 2, you talk about risk awareness. You don't have

to go there, Ted. It's really important. One of the things I keep pushing for is attribution, because that is the ultimate in risk awareness.

Hopefully, we will get there, not just in private equity, but be able to figure out where the returns are coming from in each of the asset classes.

On slide six, the GIPS compliance. I think it's important that we report it according to the industry standard. But one of the things that is a requirement of GIPS compliance is auditing. And the main reason for that is, you know, the CFA Institute doesn't want money managers running around who are not complying with the standard saying, "Oh, I'm GIPS compliant".

And so -- but it's largely for marketing purposes. So can you comment a little bit about the expenditure of audits for this, if it's not -- if we're not really using it for marketing?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yes, you're right, Mr. Jelincic, the GIPS standards do have a verification component. And there's a small industry of verifiers generally associated with accounting firms, similar to their assurance practice, where they come in and they provide verification that your returns are compiled and presented in accordance with the GIPS standards. And we're actually right in the middle of

the RFP process to evaluate the costs for -- to do that for CalPERS.

And I think at the end of the day, that will be a question for us to consider weighing the costs and the benefits. I think that we may want to consider it, at least for a number of years. We may want to consider verification. Even though we don't necessarily market, I think that there's an element of Public Trust that an independent verification might bring, that we could -- we might consider that a value to the organization over the long term.

So again, those are decisions that we'll have -- we'll have to make over the next six months as -- once we sort of understand the costs of verification.

COMMITTEE MEMBER JELINCIC: And on slide eight, the -- you're -- yeah, you're operating model. Again, I want to really indicate my appreciation in telling us what changed. That actually is very helpful.

And the other question I have was on slide 15, which was the Portfolio Allocation Committee, is very heavily dominated by fixed income folks, even though that's a smaller part of our portfolio. And I was wondering if you could comment on why that --

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I can and I will -- I will also thank those members of the

Portfolio Allocation Subcommittee. This is actually proven to be one of the more time intensive committee memberships and roles. And they've been spending quite a bit of time, both helping us make decisions.

This committee, by the way, basically helps us make rebalancing decisions. So when the fund -- we have our strategic allocation an the ranges around the strategic allocation. And as markets shift, we occasionally have to make decisions to rebalance back in some direction in alignment with the strategic allocation. And this is the committee that helps -- that helps us -- helps the ISG finally make that decision to process what the market is telling us what valuations are saying.

And these folks help provide a recommendation. The final decision remains with the ISG, assuming that we're within the ranges. And fixed income is a significant contributor to this Committee. And that's probably because they have one of the larger internal active programs.

We have an active program within our global equity group as well, they're highly quantitative. And so we definitely want to hear from and -- the contributors from global equity. But our fixed income active program is more fundamentally oriented. Looking at company valuations, leverage, credit quality, credit spreads, the

154

```
1
    overall level of interest rates, and macroeconomics.
    those skill sets and that knowledge is very helpful when
 2
3
    we're having to make these plan level rebalancing
 4
    decisions around the strategic allocation.
5
             So it's that fundamental research skill set, and
6
    the macroeconomic skill sets I might highlight that are
7
    really critical to this committee's success.
8
             COMMITTEE MEMBER JELINCIC: So it's more
9
    skill-set driven than asset background driven?
10
             CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
11
             Yes, exactly.
             COMMITTEE MEMBER JELINCIC: Thank you.
12
13
             Thank you, Mr. Chair.
14
             CHAIRPERSON JONES: Okay. You're welcome.
15
             Mr. Slaton.
16
             VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.
17
             Wylie, going back to page eight, the risk map.
18
    So the -- just to remind me and any of the other Committee
19
    members, the process of changing colors, democracy,
20
    oligarchy?
21
             (Laughter.)
22
             VICE CHAIRPERSON SLATON: No. How do you
23
   reach --
2.4
             CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
```

It's a great question. So Kit Crocker in our

25

Investment Compliance and Operational Risk Team has a couple of folks whose job it is to continually assess each of these functions, and look at, what we call, operating events, basically mistakes that bubble up. Mistakes happen any time you involve humans, so it's natural to have those.

And we have a process within the office to capture those mistakes, and bubble them up, and understand them, and to basically try to understand what control weakness generated the mistake, and is there some improvement that we could improve. It's really quite an impressive -- I would say it's an impressive cultural element that has been created in the Investment Office for folks to feel comfortable raising mistakes and discussing them in an open way, so that you can figure out what the fix is.

And the ICOR team leads that activity, but it really requires participation across the office. We wouldn't necessarily be able to glean every bit of that information if we didn't have active participation. So that's the first step.

As that information is gleaned and condensed, they're brought to our Investment Office operating committee which I chair, and it includes senior level representatives from all of our asset classes and

programs.

And any changes that we might suggest, either an increase in risk or a decrease in risk, is voted on at the Operating Committee.

And to date, we've strived for consensus. So if we don't -- if someone is dissenting and they feel it should be higher risk or lower risk, we'll basically go back to the drawing board to see if we can really understand why that is. And so far, we've been successful in achieving that level of consensus.

VICE CHAIRPERSON SLATON: Good. Well, that gives me comfort that process.

Thank you.

CHAIRPERSON JONES: Okay. Good.

Ms. Mathur.

COMMITTEE MEMBER MATHUR: Thank you.

You know, back -- well, you know. Back office functions, processes, internal controls are not generally what grabs headlines, but it is really important work.

And I am so proud of you and your team for really moving this forward so effectively and successfully over the past several years.

I think we're really leading all of our peers in on our focus on this. And given our sort of higher level of complexity, it's all the more important that we do it.

So I just want to -- I just really want to congratulate you for the significant progress we've made. And the continued high level commitment across the organization to this effort, because it's easy to sort of push these things to the side, or push them out into the future. But this is really fundamental to delivering, as you said, trust, that we are -- that were actually doing the right things to deliver value for our members

So I really appreciate your efforts.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Well, thank you. Thank you. And I will really just thank and praise my own teams, and all of the teams in the Investment Office, because the reason that we're able to move these things from red to yellow to green really represents hundreds and hundreds of hours of project work. We use the risk rankings on these functions to allocate project resource and activity and attention. So each of these tend to drive what the roadmap is focused on.

And literally hundreds of hours of work go into taking -- usually taking something from red to yellow. For example, hundreds of hours were devoted into implementing PEARS project in private equity. And that's part of the reason you'll see their portfolio management private markets has been moved from red to yellow. It's

```
still yellow, so there's still moderate risks involved.

But that was a very significant effort, and that is

mirrored across a lot of different activities in the

office, but thank you for your comments.
```

CHAIRPERSON JONES: Okay. Thank you for your presentation.

And now we go to summary of committee directions.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I was waiting for this moment. And I had a -- I lost my sheet of tabulation. So I might call on Wylie to help me a little bit --

(Laughter.)

CHAIRPERSON JONES: Well, remember now, you didn't have to take direction on --

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- so I'll fess up. I've been scrambling looking for my cheat sheet, but --

CHAIRPERSON JONES: -- the robust discussion now?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Exactly.

But I know we have a few and then Wylie, you can tell me if I have it all.

We are directed to provide to the Committee the UN global compact. And we'll do that either by a link or hardcopy depending on whether we have it.

In addition to provide the Committee a link or

hard copy depending on which we have, but we think we have the link to the CEM full report.

Those are the two that I remember. And then, oh, there's a third on the sustainability to bring back at some point a discussion around MLPs and their unique corporate structure.

CHAIRPERSON JONES: Okay.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

And I captured one additional -- well done.

Yeah.

2.4

(Laughter.)

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I think this isn't actually for staff. It's actually for Meketa so maybe that's why I captured it, because it was for them, to follow up on where the finance sector was on their particular -- on that one page in their agenda item relative to the private markets.

CHAIRPERSON JONES: Okay. Good.

Okay. Well, thank you. Then that -- we have -- go to our last item on the agenda, public comment.

We have a request to speak from two members of the public. Bryan Snow and Dr. George Diehr.

Did he leave?

And you will 50 -- three minutes.

MR. SNOW: Fifty minutes you said?

1 (Laughter.)

MR. SNOW: A filibuster.

CHAIRPERSON JONES: And the clock will start when you start speaking. Thank you.

MR. SNOW: Thank you, Honorable Chair and members of the Investment Committee.

I'm thankful for the opportunity I have to speak to you again. I was here last month as well, and I decided to dress up a little bit better this time.

(Laughter.)

MR. SNOW: I don't speak investment or finance. I've been at this meeting a second time now, and I've sat through the whole thing. And so I'm learning a little bit about what goes on and the complexity, and everything that happens at Calpers, especially with the investments.

I understand that things don't typically move as quickly as sometimes we'd like them to in large organizations. I know that you guys have been looking at divestment, or investigating, or looking into it more on possibly reinvesting in some of those things that have been divested from.

As I mentioned last month, there's's been a -there has been, and currently is, an unprecedented and
growing discontent among the great citizens of this State
with public employee pensions. The anger, and

pointedness, and the blame is rarely, if ever, pointed at CalPERS, but rather at the fire department, and the police department, and other public employees at the line personnel. And that we're the ones that take care of the citizens or care for them out in the field.

And what I'm trying to do here is not necessarily point necessarily blame, but I'm trying to give you guys a perspective of those that are CalPERS members, and -- because my -- sometimes it's hard when you're in a large; organization. You don't necessarily get out in the trenches or in the field. I think it's important that you can see that effects that your decisions have and the policies that you make, the long term and the short term.

And that it's not just when you say sustainability for the pension system, the effects that -- the investment policies and the divestments that are occurring are having -- are in short-term effects as well.

In agencies that have, I don't know, 30, 40, 50 million dollar budgets, and not 85 to 90 percent of those budgets are salaries, when you have 4 million this year, 10 million, 11 million dollar deficit the following year, that can take a really big hit on people, on CalPERS members.

And in the past, we've had pink slips have been given out to employees. Luckily, we've been able to

stymie that -- or stymie that in our agency. But the -- the point that I want to make is that divestment needs to looked at. I know that it's being looked into it, but I think it needs to be a serious thought.

A lot of the comments that I hear are very pro divestment and I understand that, but it affects a lot more than you think. It's not a social -- you're not a social justice organization. Your primary purpose is to fund pensions and retirements for your members.

And I appreciate all that you do, and hope that you'll give that even more consideration.

Thank you.

CHAIRPERSON JONES: Okay. Thank you for your comments.

This concludes the open session meeting of the Investment Committee meeting. And we will now break for lunch and return at 1:45 and start our closed session agenda.

Thank you very much.

(Thereupon California Public Employees'
Retirement System, Investment Committee
meeting open session adjourned at 12:57 p.m.)

1 CERTIFICATE OF REPORTER 2 I, JAMES F. PETERS, a Certified Shorthand 3 Reporter of the State of California, do hereby certify: 4 5 6 7 8 9 10 computer-assisted transcription; 11 attorney for any of the parties to said meeting nor in any 12 13 14 15 this 22md day of May, 2017. 16 17 18 19 20 21 22 23 2.4

25

That I am a disinterested person herein; that the foregoing California Public Employees' Retirement System, Board of Administration, Investment Committee open session meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by I further certify that I am not of counsel or

way interested in the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand

James &

JAMES F. PETERS, CSR Certified Shorthand Reporter License No. 10063